# RCMA
# NEWSLETTER
AUGUST 1987

*Photo by Rick DiFiore (CA-LA-544)*

**FIRST NATIONAL AND INTERNATIONAL ORGANIZATION OF MONITOR RADIO LISTENERS**

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### RCMA NEWSLETTER

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**FOR YOUR INFORMATION:**

1. Input to the RCMA Newsletter must be mailed to the proper editors, whose addresses are included in the individual column headlines. If no particular column seems appropiate, send input to RCMA, P.O. Box 1198, Manhattan Beach, CA 90266-8198

2. To forward a letter to a specific RCMA member whose address you do not know, put your message to that person in a stamped envelope with your return address on it; mail to RCMA General Manager, P.O. Box 542, Silverado, CA 92676.

3. PLEASE INCLUDE YOUR RCMA MEMBERSHIP NUMBER WITH ALL CORRESPONDENCE to newsletter editors or club headquarters.

4. If you require a reply when writing to RCMA headquarters or to one of the editors, you MUST enclose a self-addressed, stamped envelope.

5. Please write on only one side of the paper.

6. Please don't combine in one letter several items that should go to different addresses.

7. If you want to type what you submit to the newsletter, please don't exceed a seven-inch column width and please single space. Doing this may save an editor from having to retype the material. Please don't use script type.

8. Your RCMA membership number and expiration date appear on your newsletter mailing label.

9. You may join or renew your membership for ONLY one year at a time.

10. RCMA accepts paid advertising. For information on advertising rates and mechanical requirements, contact Carol Ruth, RCMA Advertising Manager, P.O. Box 542, Silverado, CA 92676.

# RCMA Newsletter

**Issue 138 July 1987**


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**RCMA, Inc., P.O. Box 4563, Anaheim, CA 92803**


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## CONTACTING RCMA?

**For membership applications or renewals, address changes, inquiries about delivery or renewal problems, write to:**

**RCMA General Manager**
**P.O. Box 542**
**Silverado, CA 92676**

**Have a comment about RCMA club policy or newsletter content? Write to:**

**William Mauldin, RCMA General Editor**
**961 Azalea Street**
**Boca Raton, FL 33432**

**Want a letter published in *Your Thoughts* column? Write to:**

**Kurt Swaney, RCMA Assistant Editor**
**P.O. Box 1198**
**Manhattan Beach, CA 90266-8198**

**Correspondence sent to RCMA's Anaheim P.O. Box will still be answered, but there will be a 4-6 week delay.**

Cover Photo: "Life Flight" helicopter ambulance based in Long Beach, CA.

*Photo by Rick DiFiore (CA-LA-544)*


**The RCMA Newsletter is published by members of the RADIO COMMUNICATIONS MONITORING ASSOCIATION, Inc., P.O. Box 4563, Anaheim, CA 92803. Subscription rate/membership fee is $16.50 for U.S. residents. For persons in other countries, the following rates apply: Canada and Mexico—$18.50; Europe—$20; South Pacific and Asia—$21.50. These dues are payable in U.S. funds and are subject to change. Information contained herein is obtained primarily from members and does not necessarily present the position or reflect the opinion of RCMA as a whole. RCMA, Inc. does not necessarily recommend or endorse products or services advertised herein. The publication is copyrighted©. Reproduction of any material in this newsletter is prohibited without prior written consent.**

# CALENDAR

**Send notices of upcoming events for the Calendar section to:**
**John R. Clark, 2701 Fairview Road, Costa Mesa, CA 92626**

**Deadline: 1st of the month two months prior to cover date.**

### R.C.M.A. San Francisco Area Chapter

Contact Jon Creghino CASC049
P.O. Box 1132, Mountain View, CA 94042-1132

### R.C.M.A. Greater Los Angeles Area Chapter

We are still in the process or a reorganization. Check this column next month. Late minute information may appear on 446.375 MHz. Remember the TRW Swap Meet "walk about" is the last Saturday of each month. Most of the old members are there.

### R.C.M.A. West Los Angeles Area Chapter

Contact : Rick DiFiore (CA-LA-544) (213) 397-6581 or
Hugh Stegman (CA-LA-472) (213) 398-5353
Talk in: 146.925 MHz {-600 PL-2A} Tues 1930 hrs net.

Meetings on the second Wednesday of each month at 7:30 PM. The location is Shakey's Pizza Parlor, 12924 Washington Blvd, Culver City. Take the 405 Freeway to Washington, and go west to the Shakey's at the corner of Beethoven St. Use frequency 146.925 for talkin.

Meetings scheduled for August 12, and September 9, 1987.

### Austin Area Radio Listeners Meeting

Contact David Litsinger TX-032 441-0650
P.O. Box 17142, Austin, TX 78760

Meetings 3rd Thursday 7:00 PM NOTE NEW TIME, DATE AND LOCATION

South Austin Multi-Purpose Center
2508 Durwood (off 500 Blk W. Olterf)

### R.C.M.A. Chicago Chapter

Contact Edward Robert Sirovy IL-004 312 969 2856
311 S. Williams Street, Westmont, Il 60559

| | | | |
|---|---|---|---|
| Saturday | August | 8 1987 | 1:00 PM |
| Sunday | August | 23 1987 | all day |
| Saturday | September | 19 1987 | 1:00 PM |
| Saturday | November | 14 1987 | 1:00 PM |

Visitors are welcome but please confirm the date in advance.

The Chicago Chapter requests members send a years supply of 9 SASE's plus $2.00 to the "contact person" listed above. The funds will cover the printing of a newsletter that will be sent of all chapter members just before each meeting.

### R.C.M.A. Wisconsin Chapter

Contact Scott W. Miller WI-039
122 Greenbriar Drive, Sun Prairie, WI 53590

### R.C.M.A. for D.C., MD, VA & DE

Contact: Capitol Hill Monitors % Alan Henney (MD 069)
6912 Prince Georges Ave, Takoma Park, MD 20912

Local chapter newsletter is supplementary to the RCMA newsletter. Because members are so far apart, no meetings are presently scheduled. However, anyone interested in corresponding or meeting local area members may send their name, address, phone (optional) & monitoring interests to above address. A list of these names and interests will be compiled and sent to individuals on the list. Visitor, traveler, frequency & newsletter requests are also welcome.

### R.C.M.A. Minneapolis - St. Paul Area Chapter

Contact: Chuck Steier MN-008 (612) 927-9253
4820 Hwy 7, Minneapolis, MN 55416

A SASE on file assures notification of chapter activities (tours, gatherings, etc). Non members are welcome to attend.

### All Ohio Scanner Club

Contact David B. Marshall OH-146, Managing Editor
50 Villa Road, Springfield, OH 45503-1036

The All Ohio Scanner Club covers all of Ohio, plus Inidana, Kentucky, Michican, Pennsylvania, West Virginia, and Ontario, Canada, plus other areas as well. Members from these and other areas are welcome. The AOSC newsletter also features execellent fedteral goverment and below 30 MHz utilities columns.

Sample Newsletter $2.00. Membership information for a SASE

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 ********
* Third  *
* Annual *
* Summer *
* picnic *
 *      *
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The All Ohio Scanner Club will hold it's Third Annual Summer Meeting and Family Picnic in Columbus, OH, on Saturday August 8th 1987. RCMA members are invited and welcome to attend. For details send a SASE to P.O. Box 2496, Springfield, Ohio, 45501-2496

## ASSOCIATION OF NORTH AMERICAN RADIO CLUBS NEWS HIGHLIGHTS

**ANARC is a federation of the most responsible, well-established radio listening clubs in North America. RCMA attained Full Member status in ANARC in 1977. For a list of the ANARC Member and Associate Member clubs send a self-addressed, stamped business size envelope with your request to the address below.**

**Write to: ANARC Newsletter, P.O. Box 462, Northfield, MN 55057 for the following:**

- **Copy of ANARC Club listing—send 25 cents and a business size SASE**
- **Sample copy of ANARC Newsletter—send 60 cents and a business size SASE**
- **Annual subscription to ANARC Newsletter—$7.50 for residents of the U.S., Canada, and Mexico; $10 Overseas (Airmail)**

MARYLAND DXers interested in forming a LW/MW/SW - VHF/UHF radio hobby club in Maryland, contact Izak Luchinsky, P.O. Box 5722, Baltimore, MD 21208. enclose a SASE for reply.

1988 ANARC CONVENTION will be held in Huntington Beach, Ca, sponsored by the American Shortwave Listeners Club. ASWLC has requested that World Radio Network. S.A. St. Petersburg Beach, FL. to be the organizer of the

international radio broadcasters converence to be held in conjunction with the 1988 ANARC Convention in California.

JULY 18 Saturday SOUTHERN CALIFORNIA AREA DXERS (SCADS) 10:30AM to 3PM. Meeting at a NEW LOCATION -- Lutheran Church, 1900 East Carson, Long Beach. All DXers ae invited to attend. For details send a SASE % Don R. Schmidt, 3809 Rose Avenue, Long Beach, CA 90807-4334.

JULY 31 - AUGUST 1 WORLDWIDE TV/FM DX ASSOCIATION (WTFDA), Convention at Pere Marquette Hotel, Peoria, Il. For details send a SASE to Dr. Bruce Elving, P.O. Box 24, Alolph, MN 55701. Dr Bruce Elving is the publisher of the FM Atlas and Station Directory, which is an excelent document showing the location of all FM stations, and their status. He also produces the SCA devices which allow you to pick up the sideband signals of FM.

AUGUST 14-15-16 INTERNATIONAL RADIO CLUB OF AMERICA (IRCA) Convention in East Moline, Il. For information send a SASE of I.R.C.A. P.O. Box 482 East Moline, IL 61244. IRCA consentrates on Broadcast Band A/M Dx.

SEPTEMBER 5,6,7 NATIONAL RADIO CLUB (NRC). Annual Labor Day Convention, Lima, OH. For details send a large SASE to N.R.C. % Mike Knitter, P.O. Box 24, Cambridge WI 53523-0024. NRC consentrates on Broadcast Band A/M Dx.

BENGT GUSTAFFSSON has retired after 14 years as head of Radio Sweden Internatinal.

WCSN, The Christian Science Monitor shortwave station, Boston, MA, has begun regular broadcasting, directed to Europe and Africa, but heard well in North America.

NEW ZEALAND DX TIMES features "Shortwave Bandwatch", "Shortwave Review", "Mediumwave Mailbag" plus other articles. A sample copy may be had for 3 I.R.C. sent to New Zealand Radio DX League, P.O. Box 1313, Invercargill New Zealand.

"Audio Production Techniques for Vedio" A new book by David M. Huber describes the bridging of the gap between audio and video production. The book is published by Howard Sams & Co. 4300 West 62nd St, Indianapolis, IN 46268. Price is $29.95 and contains 368 pages.

DAK Industries 8200 Remmet Ave, Canoga Park, CA 91304 has published their Early Summer, 1987 Catalog. The catalog is free.

## NEED RCMA BACK ISSUES?

**1985, 1986 and 1987 issues to date are available until Dec. 31 of this year, at which time 1985 issues will no longer be stored. The following postage rates apply to all orders, and are in addition to the cost of the newsletters.**

**THE COST OF EACH ISSUE IS $1.00**
**When ordering, calculate $1 per issue. Then refer to the chart below to the correct amount of postage. (Rates based on lst class USPS)**

| # OF ISSUES | AMOUNT OF POSTAGE |
|---|---|
| 1 | $ .73 |
| 2 | $ 1.41 |
| 3 | $ 2.09 |
| 4 thru 8 | $ 2.40 |
| 9 thru 12* | add $ .48 for each issue |

*Orders shipped at maximum of one year (12 issues) per package.

## NO COLUMN THIS MONTH. . .

**New Product Review**
**Editor:** James Abdu, 1203 N. Crossing Way, Decatur, GA 30033

**Special Events**
**Editor:** Nathaniel Lewis, P.O. Box 6592, Philadelphia, PA 19138

# your thoughts

Kurt Swaney, RCMA Assistant Editor
P.O. Box 1198, Manhattan Beach, CA 90266-8198

**Your Thoughts is the RCMA members' forum on current topics of interest to the scanner hobbyist. If you have an opinion you would like to express, RCMA encourages you to send it in.**

**Your letter must include your name, address, and RCMA membership number. Due to space limitations, RCMA reserves the right to condense submitted material.**

Dear Your Thoughts: 17 Feb 87

Just a note to tell you that I caught the request for thoughts on an RCMA BBS system and I am going to give My Thoughts.

Many members have computers and have used them extensively on Bulletin Boards. At this time I don't know of any BBS that is exclusively dedicated to the hobby of Scanning on a nationwide basis. On GEnie there is a Roundtable in the Electronics section that is dedicated to scanner users and is used by some RCMA members. Also, here in the Houston, Texas area we have a couple of BBS systems that are heavy into scanning and scanner information and I am sure there are others in other locations.

For the sake of security it would be good to have a controlled BBS system dedicated to RCMA members. There are several Freeware BBS systems that could be used for a very nominal cost that work very well and have an excellent security system built in. The cost of a PC to run the BBS would be less than $1000.00. The reason I would chose a PC is for the size of machine and availability of equipment.

Due to the cost of phone line charges it would be very expensive for some of us to spend much time on a system unless we could access it from a local number or if it had an 800 number. The cost of an 800 number would be very expensive and would only let one member at a time use the system unless multiple lines and more expensive equipment was used.

Weighing the good and the bad, including more things than I have brought up, I think it would be best for us to go with an [existing] Nationwide BBS system. At this time several of us have been using GEnie with very good success. The security level isn't there and we wouldn't have control of the system that we would have if it were an in-house system, but the cost of using the system would only be the cost of a local phone call for most members. One of the persons using GEnie lives in a remote area of Texas and has found the cost to be only around $13.00 per hour by calling the nearest GEnie access number outside of his home state. I am sure this would be true for most members in areas outside of major cities. For members that live in major cities, the cost is only $5.00 per hour at 300/1200 baud.

If it would be satisfactory for most members to use something like GEnie, we could work out a deal with them so we could sign-up at little or no cost. If there were enough users I am sure we could get our own section and break away from the Electronics Roundtable. We would then most likely need someone to be a coordinator with GEnie and I would be glad to volunteer myself to do that.

At this time I know of no conference being held for scanner hobbyists, but that could be set up very easily using the present Electronic Hobbyists section. This would enable us to set a time for everyone to get on the system and converse through the computers. Would have been a great way to discuss and cuss the past legislative action that took place [ECPA] along with having the information available to members on a daily basis. Using the GEmail section, individual members can leave personal mail for each other. Great way to swap frequencies. Want to upload a frequency list for others, no problem, upload time is free and it will be there for others to download.

If anyone would like to contact me, they may do so by using GEnie and my address is ELENTZ. I am also using Compuserve-72645,172 but do not check in there very often due to the cost.

Ed Lentz, TX-045

Dear Your Thoughts: 21 Mar 87

(This letter, from Gordon Bassett, President of the Santa Fe Modelers Organization, was sent to Bill Mauldin, RCMA General Editor.)

I'd like to thank you and the various radio clubs for your action and efforts on the recent matter of Congressional action on the use of radio scanners.

I am a dedicated railfan, rail photographer and train watcher - member of most of the national railroad historical groups. I use a scanner to find trains -- listen in my workshop at home, and keep it on in the car when I travel. It is quite difficult these days to find trains - they run on irregular schedules, don't smoke like the old steam engines, signals are hard to read (compared to the old semaphores), depots closed, and so on. The radio is a big help finding them, and entertaining to listen to. I was quite upset when I read the piece in TRAINS magazine which indicated this might soon be illegal. Of course like so many people I never quite got to writing Congress about it. Lots of things I mean to get to writing about, and never do. So I am personally grateful that some organizations did get on the ball and do something!

I should add that this hobby does have benefit to the railroad at times also. I personally have been involved in warning several trains of dangerous conditions which could have resulted in an accident, and have assisted in solving a crime against a railroad. The Chief of Police of at least one major railroad encourages responsible railfans to help keep an eye on matters of safety and security around the rails. The scanner is a helpful tool in this activity, so listening in is not just all play for us.

Thanks again for your organizational efforts on our behalf!

Gordon C. Bassett
President, Santa Fe Modelers Organization
Director, Colorado Midland Chap
Natl Railway Historical Society

Dear Your Thoughts: 14 May 87

I agree with the club's policy not to print sensitive federal frequencies in the newsletter. I do not think that it is in our interest to change this.

The issue, in my opinion, is not whether the First Amendment right of free speech prevails over the need to keep confidential frequencies "secret," it is one of "which will help the hobby more?"

I am almost sure the Supreme Court would uphold our freedom to publish the frequencies in question. But, if one of the federal law enforcement agencies started to make arrests where they found scanners along with copies of the RCMA Newsletter complete with DEA frequencies in it, then I think we wouldn't be far from seeing legislation banning scanners outright.

We do not need to tarnish our image or make things any harder for ourselves. Already we have the Electronic Communications Privacy Act, and more anti-scanner legislation may follow if the men on Capital Hill hear "horror stories" about our hobby.

Furthermore, as hobbyists, we know where the federally allocated bands are. With radios that can search those bands in any increment we choose, we can find the frequencies ourselves with a little effort. Spending a few nights hunting them down could be quite fun and rewarding. You don't want everything "spoon fed" do you?

Let's not attract unnecessary scrutiny and unwanted problems to our hobby. We should maintain a low profile at this time while trying to project a positive image. In the long run, refraining from publishing federal frequencies will benefit us.

Dear Your Thoughts: 10 May 87

Reference the May, 1987, Captain's Desk on confidential frequencies... say NO to those in RCMA Newsletters! Please!

Don't get me wrong, I'm all in favor of exchanging all sorts of scanner information. And I do so with friends and colleagues. But with all the unwanted attention our hobby is getting and with many reactionary government officials just waiting for an excuse to ban scanner production and scanner listening...we really don't need to help their cause. POP COMM magazine did just that in its May '87 issue. With friends like Kneitel and POP COMM, scanner listeners don't need any enemies.

(Larry's letter to POP COMM appears below.)

On another subject, in the two years I've been a part of RCMA, I can't tell you how much I've enjoyed the newsletter. It's a great source of info for this hobby...you people all do a swell job. So much so that I've encouraged several friends to join...

Larry

Dear Mr. Kneitel: 28 Apr 87

Your cover story "Listening In On Cocaine Alley" (May 1987 POP COMM) showed some mighty poor judgment. At a time when monitoring enthusiasts are being blasted by the Electronic Communications Privacy Act and other prohibitive legislation, your magazine gives our foes a hefty pile of new fuel for the anti-scanner fire.

If the article had highlighted the bands and frequencies used by the bad guys, it would have been great. But publishing the frequencies used by law enforcement (including the so-called "classified" FEDERAL FREQUENCIES) was just plain dumb. And the disclaimer at the end of the article makes no difference. Sure, the frequencies mentioned are "a matter of public record" and "are readily available" in many directories...but for someone (especially a lawbreaker) to find them takes a little work. It is a lot easier for the bad guys to pick up a copy of your magazine and get an idea of where the cops are. And you can be sure, someone will probably bring up this article at the next congressional hearing or the next meeting when more monitoring restrictions are proposed.

And this is NOT a First Amenmdent question if POPULAR COMMUNICATIONS <u>really</u> wants to be a voice of the monitoring hobby. Perhaps you should consider the stand of the RCMA (which your magazine has occasionally attacked) which says NO officially classified frequency, code, or ID list will be published. They're right!! If we keep publishing stuff like the May article, soon all we'll be able to monitor is AM and FM radio. The rest will be illegal or completely scrambled.

Larry

(Larry is an RCMA member whose last name and ID# have been withheld by request.)

Dear Your Thoughts: 26 May 87

Reference Los Angeles City Municipal Code (LAMC) 52.44. This is a law that has been on the books since the early 40's, but has not been ENFORCED until NOW...

LAMC SEC.52.44 WILLFULLY LISTENING TO POLICE AND FIRE DEPARTMENT PORTABLE RADIO MESSAGES PROHIBITED

It shall be unlawful for any person to willfully listen by means of any radio receiving device located in or upon any

vehicle to an official message which is being transmitted by the Police Department or Fire Department of the City of Los Angeles or any law enforcement agency over a radio transmitting station owned or operated by such city or agency. The provisions herein shall not apply to any person to whom a permit to listen to such radio messages has been issued in writing by the Chief of Police of the City of Los Angeles after he determines that public interest will be served by the issuance of such permit, nor shall the provisions of this section apply to any officer, agent, or servant of any government agency or public utility, the performance of whose duty as such officer, agent or servant, requires that he listen to such messages.

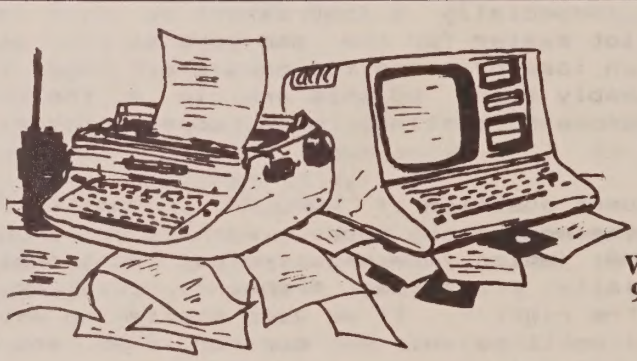
LAMC SEC.52.46 SHORTWAVE RADIOS, USE OF

No person who intercepts, overhears or receives any messages or communications transmitted by any radio transmission station operating upon a wave length or radio frequency assigned by the Federal Communications Commission for use by any police or law enforcement department shall, for the financial benefit of himself or another, communicate such messages or communication to another or directly or indirectly use the information so obtained.

These two Los Angeles City Municipal Codes (52.44 & 52.46) will be ENFORCED by the one and only Los Angeles Police Department very SOON. So does this mean all of us must go underground in the city of Los Angeles? I hope not!

With these two laws, it's going to be real slow for all the local TV news teams, they can't have scanners in their news mobiles. Well, it looks like Los Angeles City and LAPD are going to play Big Brother 1987...

Rick Di Flore, CA-LA-544



# From The CAPTAIN'S DESK

William Mauldin, RCMA General Editor
961 Azalea Street, Boca Raton, FL 33432

MONITORING AND THE LAW STARTS SOON!

I am most pleased to announce that we have a new volunteer editor in place and ready to start working on the column MONITORING AND THE LAW! Without any doubt at all, this is one of the most important subjects we have in the NEWSLETTER. As the comments last month indicated, I feel strongly that we are just seeing the tip of the iceberg when it comes to legislation and radio communications monitoring.

Your new MONITORING AND THE LAW Editor is Roger W. West, MN-052, Post Office Box 366, Wyoming, Minnesota 55092. Roger will start his assignment next month, and I am sure you will find him well qualified and ready to offer you the coverage we have been missing for so many months. Welcome to the RCMA Staff, Roger!

I ask each and every one of you to help in keeping Roger updated on the laws, pending legislation and news items which deal with radio use and monitoring. Roger can keep all of us better informed with your help and input. Remember, send along news items and other data relating to laws and legislation in your area.

## VHF SKIP SEASON IS JUST ABOUT OVER

As many of you are aware, there has been a considerable amount of skip this summer on everything from CB all the way up to the top of the VHF band. Hams have enjoyed an unusually active summer, however, as fall gets closer, the skip on the higher bands will decrease once again. There has been considerable activity on the low bands here in Florida, enough so that my scanner has been programmed to check several 37 MHz and 39 MHz channels on every run, looking for that unusual opening which brings California signals into the sunshine state when the band opens.

During the early summer months, skip on the 154 MHz band brought calls from North Florida into the highway patrol repeaters in Miami and Ft. Lauderdale. The listening has been quite varied and very interesting. The solar minimum cycle seems to have passed through the eleven year low point, and activity should increase for the next eleven years, when the high point is reached.

I can remember monitoring the North Carolina State Highway Patrol on 42 MHz almost daily here in Florida when the cycle was at the high peak. If you have not paid attention to this part of the monitoring fun, perhaps you should consider it! The listening can be most interesting as the skip opens up and the signals come booming into your area from just about everywhere. I usually keep 37.100 MHz and 39.500 MHz on the scanner roll for possible indications of a band opening.

With the solar cycle in the upward swing and the E Layer quite active this time of year, with a little selective programming on the scanner, you never know just what you will be hearing.

## U.S. MARSHALS DESTROY ILLEGAL C.B. AMPLIFIERS

Recent news reports in several radio magazines indicate the FCC and Federal law enforcement officials are strongly enforcing the rules prohibiting the use of amplifiers in the citizen's band service on 27 MHz. Recent enforcement actions in the New York area and in San Diego brought about arrests and equipment confiscation of illegal CB power amplifiers. Many of the linear amps were capable of putting out hundreds of watts on the CB band.

The active Federal investigation and enforcement by the U.S. Marshal and the FCC has put a real dent in the manufacture and supply of the illegal equipment. Violation of the federal law can bring violators as much as $100,000 in fines and up to one year in prison. The problem has been so bad in Washington, DC that CB amplifiers are actually causing interference in and around the Washington National Airport as many of the CB dispatched cabs are using the illegal equipment.

## CHANGES IN SERVICE ADDRESSES FOR BEARCAT AND KENWOOD

The Kenwood USA Corporation has expanded and moved to a major new facility in Carson, California. The new address for Kenwood service is 2201 East Dominguez Street, Long Beach, CA 90810. The mailing address is P.O. Box 22745, Long Beach, CA 90801. The new telephone number is 213-639-9000.

Uniden Bearcat also has a new address. For Uniden Bearcat service, the address is Uniden Service, 6345 Castleway Court, Indianapolis, IN 46250. Their phone is 317-842-1036.

## REGENCY ASKS FOR SCANNER LABELS

Regency Electronics has submitted a Petition for Rulemaking urging the FCC to require labels on scanners which would read... "Improper use of this device may violate the provisions of the Electronics Communications Privacy Act (ECPA) of 1986 through the intentional unauthorized interception of protected radio communications".

Your new MONITORING AND THE LAW Editor, Roger West, will be keeping you posted on this and other events which are sure to come as a result of the Act passage. As this article is being written, the date for comments on the Petition has just passed, and the FCC has not acted on the matter.

## HAM ARRESTED IN SAN DIEGO FOR JAMMING FBI CHANNEL

The FBI recently arrested a local amateur radio operator for jamming of the FBI frequencies in the San Diego area. Following much investigation by the FBI and FCC, directional detection devices were used to track down and arrest the man as he allegedly played music and broadcast other noises on the FBI repeater frequency. The jamming took place on several occasions, but was especially disruptive during times when FBI agents were involved in bank robbery investigations and other urgent matters. The case has not come to court as of this writing, but should make your local news when the case is concluded. No reason was given for the jamming attack.

## STATE OF FLORIDA ANNOUNCES STATEWIDE 800 MHz MUTUAL AID CHANNEL

The State of Florida has announced they are establishing an 800 MHz Mutual Aid Frequency. The frequency of 853.875 MHz will join the already statewide 155.370 MHz channel as a universal use mutual aid frequency. The new state frequency plan lists the following frequencies as statewide use channels: 45.860 MHz; 154.950 MHz; 155.370 MHz; 460.275 MHz; 853.875 MHz; and Med 1 through Med 10. Keep your Editor advised if your state takes any action on their state-wide frequencies!

## FLORIDA TROOPERS GET OKAY ON TELEPHONES IN CARS

The Florida Highway Patrol, like many other law enforcement agencies, is keenly aware that the use of a cellular telephone in a patrol vehicle can be a very effective and useful tool. The FHP has issued written permission for state troopers to use and install their own cellular phones in their patrol cars. Of course, the state trooper must pay for the phone and be responsible for the bill, but it is a start. Only those closely connected with the FHP can remember the long, hard battle fought over getting "official permission" for the installation and use of CB radios way back when. Other steps to expand law enforcement and cellular phone use will follow.

## GORDON WEST RADIO SCHOOL ANNOUNCES NEW COURSE

The Gordon West Radio School has announced a new custom developed Morse Code and theory course selling for under $20 designed to help the new applicants interested in amateur radio. The fully illustrated voice class license preparation manual was written by "our own" Gordon West and Fred Maia, W5YI. The package offers an easy to use, detailed study package for those considering the new Novice Class license. The package comes complete with questions and answers, study materials and the FCC Form 610, used to make application for the amateur license. Details are available from Gordon West Radio School, 2414 College Drive, Costa Mesa, CA 92626.

## NEW PUBLICATIONS THIS MONTH

Fox Marketing Inc. has announced two new directories this month... the revised Scanner Radio Listings for COLUMBUS AND SOUTHEASTERN OHIO has just been released. The 188 page book covers the OHIO area in detail, and offers much updated material and data not found in the earlier edition.

Fox has also released their new Scanner Radio Listing directory for the New England States. The directory is another major regional directory for Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont. Fox covers each state in detail and offers something on just about every radio service. The book is 160 pages of cross references, frequency lists, system and code details. Monitoring the New England area is easy and fun with this detailed listing at your finger tips.

For more information on the complete Fox Scanner Radio Listings, write or call Fox Marketing Inc., 1-800-543-7892 U.S.A. wide, or in Ohio 1-800-621-2513 toll free. We appreciate Fox making these publications available for RCMA review, and want to thank them for mentioning RCMA in each publication.

RCMA appreciates the opportunity to review any and all publications devoted to our hobby of radio communications monitoring. We encourage publishers to submit their materials to us for review in the NEWSLETTER. We encourage our membership to support those publications which mention our club in their books. Advertising rates for publishers is available by contacting the RCMA Business Manager, Carol Ruth.

## NEW MAGAZINE DEVOTED TO DIGITAL COMMUNICATIONS

CTM Magazine, published monthly by Lambert Publishing House, 1704 Sam Drive, Birmingham, Alabama 35235 is a new publication devoted to radio communications and the many modes of computer communicating. Devoted mostly to the amateur radio user, but with many articles of interest to the communications monitoring buff, CTM is an interesting and most enjoyable magazine. The articles on packet communications, computer interfacing and radio in general would make this magazine a must for the advanced radio monitoring shack. More information can be obtained by writing the publisher. Tell them that you heard about their magazine in our RCMA NEWSLETTER.

## STAFF CHANGES AT RCMA THIS MONTH

Effective with this issue, Gordon West becomes the Editor of RCMA AMATEUR RADIO. Gordon has an extensive background in amateur and marine radio, and with his new assignment, Gordon will be able to keep all of us up to date and well versed on the events and news in the amateur community. I know you will find Gordon's articles most enjoyable and informative.

With Gordon West moving to AMATEUR RADIO, Terry Stader moves to become the new RCMA TECH TOPICS Editor. Terry is well qualified both professionally and personally to handle the most important TECH TOPICS subject, and I am most pleased to have him make the transfer to this opening. We have looked for many months to find a person who is qualified to write our technical column.

With is transfer in assignments, and our new Editor for MONITORING AND THE LAW, the RCMA staff is complete now except for an Editor for SPACE COMMUNICATIONS.

## LISTENER'S SURVEY REPORTS

As this article is being written, the Listener's Survey reports published in the June NEWSLETTER are starting to come in. I am sending them along to either Joe Lewis or to the editor who should use and print the information. This Survey will be most helpful in getting data into the hands of the general membership in the next few months. Your input and assistance is most certainly appreciated. Thanks to everyone who took the time to complete the forms and send them in.

FINAL COMMENTS... Remember, if you are interested in being "wait listed" for any RCMA volunteer staff position, send me that typed letter of application so we can put you on file for consideration when that opening takes place!

# AIRCRAFT

**Send private, commercial, firefighting and law enforcement aircraft frequencies of interest in the 108-136 MHz range and frequencies in other bands above 30 MHz associated with airports and aircraft plus questions, articles and tips related to aircraft monitoring to:**

**Darrel Charest, 1913F Oak Creek Lane, Bedford, TX 76022**

As I went to bed last night, I knew the alarm was set for an early wake up call so that I could make our weekly seniors golf outing. My plans were changed some however when I awoke to low clouds and a drizzling rain. The rain solved one delimma, when would I have time to put the August column together. Today, of course!

Last month we talked a little about separation standards in air traffic control. We specifically discussed those applied for radar separation. In this issue let's talk about those used in the tower where the controller applies the separation by visual contact with the aircraft. Separation minimums in this case are measured on the runway. This may not come as a surprise to you, but I would give some long odds that it would come as a surprise to the vast majority of pilots. If you monitor a relatively busy airport that has a lot of general aviation traffic, you will hear the controller make a variety of transmissions to aircraft such as "Extend your downwind leg, widen out your base, square off your turn to final, reduce speed as much as feasible, 'S' turn as necessary to follow the Cessna ahead, etc." But when all is said and done the separation is applied on the concrete runway. Two light single

engine aircraft need 3000' between departures, between arrivals or between a departure and an arrival. For twin engine aircraft this is increased to 4500' and for jet traffic only one aircraft may be on the runway at any given moment. For example let's say that you have a Lear on a three mile final to land when when a Sabreliner calls for takeoff. In this situation the controller must be certain the departing Sabreliner will be over the end of the runway on takeoff, before the arriving Lear crosses the landing threshold. There are, of course, many variations such as crossing runways, parallel runways, adjacent airports that complicate the job of the air traffic controller, and if you are interested in these the FAA publishes the "Handbook of Air Traffic Control" designated ATP 7110 and is available from the Government Printing Office. By now you may be asking yourself who controls the aircraft while they are within the airport traffic area, i.e. 5 miles from the control tower. The answer is - the tower controls these aircraft but the responsibility for collision avoidance is that of each pilot - to see and avoid the other aircraft. As we said before the tower will issue a variety of instructions to aircraft under their surveillance, and the aircraft are obligated by regulation to comply, but the actual separation is applied at the runway.

Next month our discussion will take a different view of the airport/terminal control, in that we will see how a busy aircarrier airport differs from one that primarily serves general aviation traffic.

We've had good response from you this month through the mail so lets get on with your contributions for the month.

George Wight, CATØØ1, provides us with some information and frequencies from the Reno/Lake Tahoe area. In response to some inquiries from me George replied that he lived near Yosemite Park at 3500 ft elevation above the floor of the Sacremento Valley and with an elevated outdoor antenna was within range of radio activity all through the Sacremento/San Joaquin valley. He reports good results on his Regency HX-1200 45 channel hand-held scanner and his BC-250. I'm sure many of you have seen George's contributions to a number of other columns in the Newsletter in addition to those provided us for aircraft listening. As an apartment dweller, I can only dream of having a listening station to match that of George's.

David Schneider, NJ-227, wrote to ask why he was hearing aircraft on a fire channel in his area. And thanks to some help from our membership earlier, I was able to explain that he was hearing an image of the IF in his receiver. David went on to say that he's a new member of RCMA, is 17 years old and recommended visiting the old control tower at Teterboro. He also listed frequencies he monitors in the New York/New Jersey area and enjoyed the airport charts in the May issue furnished by Howard Richmond, NY-163. David's frequencies appear at the end of the column.

Donn Edwards, NY-021, wrote an informative letter and included a huge amount of background information for his area - sector charts, frequency listings and changes taking place in the division of airspace in the New York/Boston Center areas. He reports that several months ago New York Center delegated about half its northern area to Boston Center - mostly airspace in the New England area. New York Center continues to exercise control over Southwestern New York, Western Pennsylvania and south to Central New Jersey. In the New York metro area 123.05 is used heavily by aircraft operating below 1500. This same channel is used extensively by helicopters along with 123.075 as a combination CTAF/Unicom channel. The 122.75 frequency is also used extensively by helos and seaplane air taxis as well as network traffic reporters. Donn reports that 123.45 is active with helo traffic self announcing their position and intentions at Bridge, Governors Island and Newtown Creek. Traffic over Manhattan is required to operate at 1500 AGL or higher and controlled while transiting the New York TCA. Search and rescue traffic including NYPD and USCG helos are active on 123.1, especially during the summer months. Kennedy Tower uses 125.25 for aircraft operating at 500 and below while in the JFK area. From the wealth of information and data he provided, I've concluded Donn is an expert on air traffic operations in the New York area and we appreciate hearing from him.

Our General Editor, Capt Wm Mauldin, mailed a clipping with information on changes occurring in the Enroute Flight Advisory Service (EFAS) system. In the past, 122.0 was used exclusively for this service. While 122.0 will continue to be used for aircraft operating below 18,000 MSL, aircraft above that altitude will use 127.625 in the Albuquerque Center area, 135.7 for Los Angeles, 135.9 for Oakland, 133.025 for Salt Lake City and 133.925 in the Seattle Center area. We can look for more of these frequencies allocated to specific Center areas.

Chuck Gysi, PA-005, wrote with more detailed information about the operation of Med-Evac helicopter communications at Lehigh Valley Hospital Center at Allentown, Pa.

Chuck speculated that the dispatch of the helo might be on a hospital paging channel, they could be heard all over Eastern Pa and Northwestern NJ on 155.22 with Base stations IDing as "Trauma Center" or "Center" and helos IDing as "MedEvac One" etc. Patient reports and various other landing information is also relayed on this channel. The MedEvac helos also have the capability of communicating on frequencies used by ambulance squads and fire departments within its coverage area. For example, when responding to Hunterdon County, NJ, MedEvac uses 154.965 repeat or simplex to contact ambulance crews at the landing site and for patient information.

Roger W. West, MN-052, forwarded a list of aircraft channels he monitors in the Wyoming, Minnesota area. Roger tells us that Wyoming, Mn is located about 40 miles northwest of the Twin Cities and close enough for him to enjoy listening to airports in that area.

Fred Shabec, IL-336, wrote to let us know the 135.15 ATIS frequency had been changed to 135.4. The second ATIS frequency 139.9 remains the same. Fred didn't mention if 135.15 was the departure or arrival ATIS, but its of no real concern to us anyway as long as we have both ATIS frequencies.

Our Business, West Editor, Cliff Polkinghorn, sent a comprehensive list of channels for Hawaii. I'm hoping we have space enough for all of them, otherwise we will print what we can. Cliff prepared these frequencies from an Airport Directory published by the State of Hawaii. As we've mentioned in previous columns, many states do print directories that not only provide a wealth of frequency information but often detailed information on runways, service facilities, as well as accomodations for travellers such as motels, rental cars etc. In many cases these Airport Directories are provided free by the state, others charge a few dollars for the book.

As we are in the process of putting this months column together, today's mail included a letter from H. Irvin Smith, TX-022. He asks several questions about using a scanner while riding as a passenger in an aircraft. First, he asks if the scanner might cause interference with the aircraft avonics, and the answer is yes it could. Second what range would the scanner have, if permitted to use it aboard the aircraft? And I must confess that I don't know, but some of our RCMA members have asked and received permission to use scanners in flight and have reported good results. Third, does the metal skin of the aircraft shield the reception. Once again I don't know, only as I mentioned before members have reported good results in flight. Federal Air Regulations preclude the operation of electronic equipment in flight, so before you do make any attempt to use your scanner, secure permission from the Captain. Interference in this case is not just a matter of inconvenience, but could conceivably affect the navigational system. The end result could spell disaster - so by all means don't use it without permission.

Irvin posed the question of using a scanner aboard an aircraft, but there are a number of other electronic devices that are easily carried in flight such as calculators, tape recorders, computers and perhaps others. The Federal Regulation does not specifically refer to radios/scanners but talks about "Electronic Devices" so before you put that briefcase computer to work in flight - check to see that its permitted.

Several months ago in an exchange of correspondence with John P. Leth-Nissen, he made the suggestion that we might provide some information to our readers on the "Heads Up Display" HUD that is part of all fighter type aircraft. And while I've used this type display during my one flight in the F-15 and in simulators such as the F-111, it has been so long ago that I remember very little about the system. I do have a book on the F-15 and it makes several brief references to the HUD but lacks any details on the unit. If any of our readers can fill us in on this fascinating piece of engineering, I'm sure we would all benefit. And while waiting for a response I'll try to serve up what little I can remember. The HUD is a piece of glass and in some cases may be the windshield itself upon which a number of items are projected. It allows the pilot to see through the windshield without obstruction, yet clearly in front of him are displayed a number of items, many from computer systems in the aircraft itself. In the F-15 this display might include the target, its range, closure rate, the G forces being applied to the target aircraft, and a bewildering assortment of other data. Perhaps the easiest means for a simple explanation of how the HUD works is to get behind the seat of your automobile, then place a sheet of white paper on top the dashboard. The paper will show very clearly on the windshield, especially in sunlight so much so in fact that it can be very distracting. This same principle is use in the heads-up-display.

Randy Fazelle telephoned several days ago to say he was a member of RCMA and had moved to the Ft Worth/Dallas area from Portland, Ore. Randy was interested in radio channels that would be active next in our area. We were able to welcome him with a list of public service and aircraft channels that I monitor, but I advised him the real authority on monitoring in the area was Brad Carpenter - who is also a regular contributor to the RCMA Newsletter. Randy called again a few days later to confirm receipt of the frequency list and to ask a few more questions about aircraft operations in the area.

Here are some of the frequencies we promised earlier.

Lets begin way out west - in Hawaii with those frequencies submitted by Cliff Polkinghorn.

The list is not complete in that we are covering only those airports with a control tower.

Kaneohe MCAS

Tower 120.7 349.9 360.2 Approach 125.0 263.6

Molokai Airport

Tower 125.7 ATIS 128.2 Honolulu (Radio) FSS 122.2

Kahului Airport

Tower 118.7 279.6 Ground 121.9 348.6 A/C 119.5 343.8 Dept. 120.2 322.4
ATIS 124.6 Honolulu (Radio) FSS 123.6 272.7

Keahole Airport

Kono Tower 120.3 257.8 Ground 121.9 ATIS 127.4
Honolulu FSS 123.6 119.3

General Lyman Field

Hilo Tower 118.1 263.1 Ground 121.9 ATIS 126.4 Honolulu FSS 122.2 122.6

Hickam AFB

133.6 Use unknown

Honolulu International Airport

Tower 118.1 257.8 Reef Runway 123.9 268.7 Ground 121.9 348.6 Ramp 121.8
Clrnc Del 121.4 281.4 App East 119.1 265.0 App West 118.3 269.0 App N. 119.1
Dep East 124.8 317.6 Dep West 118.3 269.0 Dep North 119.1 265.0
ATIS Arrival 127.9 279.4 Departure 132.2 374.9
Unicom 123.3

Lihu Airport

Tower 118.9 263.1 ATIS 126.8 Ground 121.1 Honolulu FSS 126.5 119.9

Ed. Note: There are a very few airports for seaplanes that have control towers. I believe Alaska has two - Lake Hood and Ketchikan. Under Honlulu Intnl Airport note the reference to Reef Runway - I believe this is a water landing area controlled from Honolulu tower. If any of you can shed some light on the matter, please write.

Here is the list for Nevada provided by George Wight.

Lake Tahoe

Tower 118.4
Ground 121.9
Unicom 123.0

Carson City

Unicom 122.8

Hawthorne Airport

Unicom 122.8

Fallon NAS

Tower 126.2
Apch 119.25

Reno International Airport

Tower 118.7 FSS 122.35
Apch 119.2 FSS 122.5
Apch 126.3

Reno Stead Airport

Unicom 122.8

George also reports that Angels Camp airport is closed, the only airport open in Calaveras County is at San Andreas and their Unicom operates on 122.8.

David Schneider sent this list for the New Jersey area.

| Newark International | | Teterboro Airport | | New York | | | |
|---|---|---|---|---|---|---|---|
| Tower | 118.3 134.05 | Tower | 119.5 125.1 | App | 127.6 | Dept | 119.2 |
| Ground | 121.8 121.65 | Grnd | 121.9 | | 127.7 | | 120.05 |
| Clrnc | 118.85 | Clrnc | 128.05 | | 128.55 | | 135.35 |
| ATIS | 115.7 132.45 | ATIS | 108.4 114.2 | | | | |

Roger West monitors these channels in the Twin Cities area in Minnesota.

| Minneapolis Wold Chamberlain | | Flying Cloud | | Anoka | | St. Paul | |
|---|---|---|---|---|---|---|---|
| App | 119.3 | Tower | 118.1 | Tower | 118.2 | Tower | 118.35 |
| Dept | 120.0 | | | | | CAP | 148.15 |

| Crystal Airport | | Forest Lake | | Rush City | | Lake Elmo | |
|---|---|---|---|---|---|---|---|
| Tower | 120.7 | Unicom | 122.7 | Unicom | 122.9 | Unicom | 122.8 |

Here is a listing of Boston ARTC Center frequencies submitted by Donn Edwards. Although Donn has these broken down into Low/High altitude useage we will just show the remote site and associated frequencies.

Boston Air Route Traffic Control Center Air/Ground Remote Frequencies

| | | | | | |
|---|---|---|---|---|---|
| Augusta, Maine | 134.95 | Bucks Harbor, Maine | 133.25 | Cummington, Maine | 132.65 |
| Gardner, Maine | 123.75 | Houlton, Maine | 128.05 | Melrose, Maine | 119.25 |
| | | | 120.25 | | 120.35 |
| | | | | | 127.65 |
| | | | | | 134.75 |
| Millinocket | 128.05 | St. Albans, Maine | 128.05 | | |
| | | | 120.25 | | |
| | | | 124.25 | | |
| South Acton, Me. | 118.55 | East Burke, Vt. | 127.75 | Mt Mansfield, Vt | 127.8 |
| | 128.2 | | | | 135.7 |
| Berlin, NH | 135.7 | Concord, NH | 134.3 | Lebanon, NH | 134.85 |
| Barnstable, Ma. | 133.45 | Cambridge, Ma. | 133.85 | Rockdale, Ma. | 132.75 |
| | 134.175 | | | | |
| | 135.475 | | | | |
| | 128.75 | | | | |
| | 132.9 | | | | |
| Calverton, NY | 133.3 | Huguenot, NY | 120.2 | Kingston, NY | 133.1 |
| Lake George, NY | 127.8 | Pawling, NY | 121.5 | Sayville, NY | 133.425 |
| | 126.35 | | | | |
| | 133.625 | | | | |
| | 134.85 | | | | |
| Turin, NY | 125.45 | Utica, NY | 134.55 | Woodstock, NY | 124.85 |
| | 127.8 | | | | 127.35 |
| | 135.25 | | | | 133.85 |
| | 127.9 | | | | 123.95 |
| | | | | | 134.7 |
| Shelton, Cn. | 128.7 | | | | |
| | 132.3 | | | | |

Donn also included a complete listing for New York Center, but these must await later issues of the Newsletter. We'll also try to include Sector charts another time.

## RCMA has a Telephone Number

**The new RCMA telephone number is (714)545-9551. It's 'manned' by an answering machine, and while it's been established for RCMA members, its use is limited. You may leave a message concerning delivery or renewal problems; you cannot use it to request club information or order back issues. Appropriate response will be made by letter or postcard, not by telephone. Any call regarding a membership problem MUST be accompanied by your membership number.**

**Please remember that it is a toll call, so be sure before you dial that a written communication won't do just as well.**

# AMATEUR RADIO COMMUNICATIONS

**This column is for reporting on amateur radio activities that may be of interest to scanner listeners. Send reports and questions concerning repeater nets, civil emergency systems, packet ratio, amateur TV, etc., to:**

**Terry Stader, MI-062, 8 Christopher Road, Westford, MA 01886**

**Welcome to the July Amatuer Radio Column.....** Again things have been pretty busy around here. Lots of activity on the bands with the recent passing of the **NOVICE ENHANCEMENT** privilages as I talked about in the May column. Almost coincidental with the startup date of the new privilages, the Novice phone portion of 10 meters (28.300-28.500 Mhz) has really opened up. Several Nets for Novices (and Technicians, too) have sprung up all over this new section of the band. The other night I worked call areas 1,4,7,8,9 and 0, all on a long wire strung out through the yard. 73 Magazine (June 87) is dedicated to the 1296 Mhz band, giving the details about the equipment, antennas and characteristics of the band. Good reading.

By the time you are reading this column two of the big events that scanner listeners/HF'ers might tune into will be over..... but, did you get the chance on the second weekend of June to tune into the VHF/UHF Contest and then on the fourth weekend in June to tune into Field Day? If you missed them, then mark those dates in your 1988 calendar. Alot of activity on the bands during these contests. I am busy getting ready all of the equipment for both of these events now.

With the weather finally warming up here in New England, the "hamfests" and "flea markets" are cropping up all over the place. Here is a chance for you to pick up some real bargins (and some boat anchors, too).

Speaking of the weather, severe storm and tornado season is well upon us by now. Have you heard any of the SKYWARN Weather Nets in your area. Last year we had a column about the emergency coomunications side of Amatuer Radio. Drop me a line if you have the inside scoop about your areas activities.

Got a couple of letters this past month. One from **Marshall Cubitt, CANA 128** with a list of repeaters in Eastern Ontario, Western Quebec and Northern New York.

**EASTERN ONTARIO**
City of Ottawa

| Freq. | Call Sign | Comment |
|---|---|---|
| 145.15 | VE3PAK | PACKET REPEATER |
| 146.61 | VE3RST | AUTOPATCH |
| 145.45 | VE3??? | TOWN OF MANOTICK, NEW? |
| 146.85 | VE3OCR | CARELTON UNIVERSITY ARC |
| 146.88 | VE3ORA | |
| 146.94 | VE2CRA | OTTAWA ARC |
| 146.73 | VE2CSO | FRENCH ONLY |
| 147.03 | VE3TEL | TELEPHONE PIONEERS |
| 147.12 | VE3OTT | |
| 147.15 | VE3MPC | R.C.M.P. COLLEGE ARC |
| 147.30 | VE3TWD | |
| 147.36 | VE2KPG | |

Other Cities

| Freq. | Call | Comment |
|---|---|---|
| 146.76 | VE3NRR | PEMBROKE |
| 147.06 | VE3STP | RENFREW |
| 147.18 | VE3SVC | CORNWALL |
| 145.37 | VE3OJE | MOOSECREEK |
| 146.76 | VE3SVR | MORRISBURG |
| 146.82 | VE3BAT | BROCKVILLE |

| | | |
|---|---|---|
| 147.12 | VE3RLR | SMITHS FALLS |
| 147.27 | VE3IHZ | ALMONTE |
| 146.62 | VE3KAR | KINGSTON |
| 146.94 | VE3KNR | KINGSTON |

**NORTHERN NEW YORK**

| | | |
|---|---|---|
| 147.255 | W2WLR/R | WATERTOWN |
| 146.70 | | WATERTOWN, LINKED TO BELOW |
| 147.015 | | LOWEVILLE, LINKED TO ABOVE |
| 146.91 | N2MD/R | RUSSELL |
| 147.33 | WB2ZIY/R | TUPPERLAKE |
| 147.225 | | MALONE |
| 147.39 | | POTSDAM |
| 147.00 | | AUBURN |

**Miscellaneous**

| | | |
|---|---|---|
| 146.94 | VE2RCR· | ALMA, QUEBEC |
| 146.91 | | SYRACUSE, NY |
| 146.91 | VE2RAU | MONTREAL/DORVEL, QUEBEC |
| 147.06 | VE3RTP | TORONTO, ONTARIO |
| 147.06 | VE2RG | MONTREAL, QUEBEC |
| 147.255 | | BATAVIA, NY |
| 147.335 | | ??? QUEBEC |
| 147.255 | VE2RAX | QUEBEC CITY |
| 147.21 | VE2RBV | VALLEY FIELD |

Very Nice list, Marshall. Thank You. Maybe some of you can fill in the blanks? Though, there are not many!

Just a reminder for some of you that have computerized frequency lists, you can send them to me (at least the Amateur Radio portions) through anyone of the telecommunication services I subscribe to. Send them via E-Mail or upload them and let me know where/how to get them. I will be uploading this column onto Compuserve's HAMNET starting with this months column (except the pictures).

You can reach me at these services, I check into them at least twice a month more on some.

| | | | |
|---|---|---|---|
| Compuserve- | 72415,1415 | GEnie- | TSTADER |
| The Source- | BDZ889 | Delphi- | TSTADER |

Again, I got another letter from **George Wright CA-TO-001.** While George was travelling in the Reno/Lake Tahoe area he reports the following active repeaters all received on his Regency HX-1200 that he takes everywhere he goes. Sound like you are on the road more than I am George! Thanks again for your consistent contributions to this column!!!!

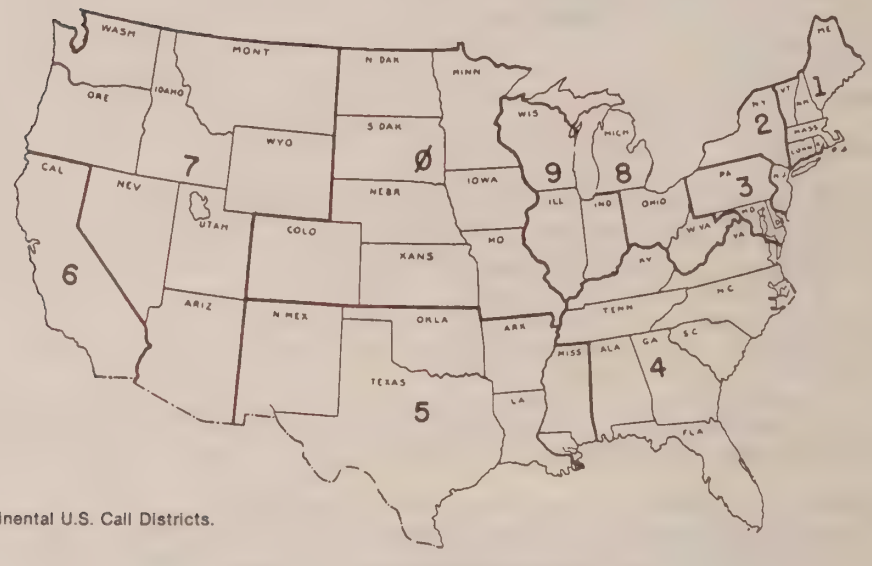
| Freq. | Call | Comments |
|---|---|---|
| 146.61 | WR7ABI | RENO |
| 146.03 | N7RH | RENO |
| 146.85 | WR7AKI | HEAVENLY VALLEY |
| 147.21 | WR7ANW | STATELINE |
| 147.615 | WR6AXA | LAKE TAHOE |
| 146.76 | WR7ABN | RENO |
| 146.79 | WR7AHQ | RENO |
| 147.18 | WR7ACW | RENO |

Also while in the Junction City, Kansas area he picked up the 146.88 WOCR repeater.

Shown here is a map of the U.S. Call Districts as well as a chart that shows the prefixes for those are not part of the Continental U.S.

**FCC-Allocated Prefixes for Areas Outside Continental U.S.**

| *Prefix* | *Location* |
|---|---|
| AH1, KH1, NH1, WH1 | Baker, Howland Is. |
| AH2, KH2, NH2, WH2 | Guam |
| AH3, KH3, NH3, WH3 | Johnston I. |
| AH4, KH4, NH4, WH4 | Midway I. |
| AH5K, KH5K, NH5K, WH5K | Kingman Reef |
| AH5, KH5, NH5, WH5 | (except K suffix) Palmyra, Jarvis Is. |
| AH6, KH6, NH6, WH6 | Hawaii |
| AH7, KH7, NH7, WH7 | Kure I. |
| AH8, KH8, NH8, WH8 | American Samoa |
| AH9, KH9, NH9, WH9 | Wake I. |
| AHØ, KHØ, NHØ, WHØ | Northern Mariana Is. |
| AL7, KL7, NL7, WL7 | Alaska |
| KP1, NP1, WP1 | Navassa I. |
| KP2, NP2, WP2 | Virgin Is. |
| KP4, NP4, WP4 | Puerto Rico |
| KP5 | Desecheo |




Continental U.S. Call Districts.

Prior to Gordon West's reassignment to Amateur Radio, he was going to edit a column called "Ask Gordo." Below is the first—and last—edition of that column; next month 'Gordo' takes over as editor of Amateur Radio. Thanks to Terry Stader are in order; look for him next month as the new editor of Technical Topics.

Each month our Questions & Answers column will feature a specific topic. The topics will be selected from the correspondence that is received from the readers of my columns in this publication and others. Unfortunately, due to the volume of mail, I am unable to write everyone back an individual answer to your letter. However, if you enclose a self-addressed stamped envelope and will allow me to scribble a quick note on your correspondence, I am more than happy to jot you a note!

NOISE. This month we will take a look at causes and cures of noise interference to scanners and shortwave receivers. We'll tell you some secrets on how to keep your computer from generating phantom heterodynes every 25 kz! I have also included a comprehensive list of manufacturers and their noise elimination products. Write them for a brochure, and tell them "Gordo" sent you. You may also wish to clip out this column and file it under "Noise Elimination". Here are some of the popular questions I have received about NOISE:

Q. What is meant by the term "EMI"?
A. EMI is defined as any electromagnetic disturbance that interrupts, obstructs, or otherwise impairs the performance of electronic equipment. This normally takes the form of low-voltage, high-frequency energy that "rides" on the normal AC sine wave.

Q. What frequencies does an EMI pulse cover?
A. It may cover the entire frequency spectrum, from 10 kz to 300 gigahertz. It can be radiated or conducted through power and signal lines. Radiated EMI is often referred to as radio frequency interference, abbreviated "RFI".

Q. What is the greatest source of EMI and RFI to my base scanner system?
A. It will probably be your computer. Computers can generate enough RFI to lock up a scanner on just about any frequency you may program. You can tell it's your computer by simply turning it off, and then watching the interference immediately stop. If your scanner is working fine until you turn on your computer, it's for sure the computer causing the problem.

Q. Is the computer EMI RFI getting into my scanner from the power lines? Can I use a filter to filter out this interference?
A. Computer interference is usually radiated, and not often conducted by power lines. Adding a filter on your power leads probably won't do a thing but make the filter seller happy. The radiated noise can go several hundred feet--and it's quite possible that your neighbors next door or across the street can also lock up your scanner when they turn on their home computers. The interfering signals travel through the air with the greatest of ease--and you can tell it's computer noise because it will change pitch as different computer programs are run.

Q. Are filters on my antenna circuit useful in cancelling out RFI from computers?
A. No. Since the noise is on frequency, and on many frequencies, your scanner receiver picks it up just like a weak signal out there in radio land.

Q. What's the best way to reduce radiated interference from my own computer?
A. Grounding, shielding, and isolation. Ground the metal chassis of your computer to a cold water pipe (not PVC!) or to any good earth ground. Use copper foil--never use round ground wires. Round ground wires look reactive to radio frequencies, and should be avoided. Copper plumber's tape is a good flat ground conductor. Also ground the metal chassis of your scanner receiver and shortwave set.

Shielding is your next best bet for your computer. Older computers have little shielding on the inside. You can shield the inside of your computer with inexpensive aluminum foil. Just make sure to not short out any computer components with the aluminum foil. Ground the aluminum foil to the metal frame of your computer. You may initially test the value of shielding by wrapping the computer completely up in aluminum foil, just like a turkey--on the outside. Ground the foil, and see whether or not this will reduce RFI. If it does, then you know you need to shield the inside of your computer case.

Isolation is a last resort. Move your computer away from your communications post. Buy a computer power line filter to see whether or not this may help a bit.

Shielding the tube of the computer sounds impossible, doesn't it? No problem here with a new transparent conductive coating material that filters out RFI, but lets 95 percent of the light through! It offers up to 70 dB attenuation at scanner frequencies, and it blocks out any RFI escaping through the glass of your video monitor. For a catalog, write Southwall Technologies, 1029 Corporation Way, Palo Alto, California 94303; 415/962-9111.

Q. How can clear plastic over a picture tube actually filter out EMI?
A. Ever see the outside of new office buildings with windows that look silver-plated? Same idea here--but with less light reduction. The film contains conductive gold on one surface that filters out RFI, yet lets through almost 95 percent of the video lighting. It's amazing--transparent yet conductive. You ground it out to cancel EMI radiation from the tube.

Q. I thought FM sets were immune to AM pulse ignition interference from an engine. Is my scanner no good?
A. Even the best commercial FM transceivers cannot cancel out amplitude modulation (AM) interference pops. They still creep through the discriminator circuit, and ride alone with weak signals. Ignition pops that increase in rate as you rev your motor can usually be traced

to the high voltage ignition system. Replace old resistant plug wiring for new resistant-type plug wiring that may have a fiberglass fiber core impregnated with a conductive powder. Go with resistance type plugs designed for your engine.

Q. What filters can I use on my engine coil and regulator?
A. Low-pass or feed-through filters at the coil in series with the connection to the key and any other connection made to the battery side of the coil should help knock down EMI. Most of these filters are a low-pass, pi -type LC filter rated at 5 amps with good characteristics from .1 MHz through 300 MHz.

The filter should be mounted solidly to the engine or the coil bracket as close as is convenient to the battery terminal of the coil. Keep filter wire leads short. Make sure everything is well DC grounded to your automobile frame.

Voltage regulators (mechanical type) should be left alone, but try some aluminum foil shielding over the voltage regulator wires to keep them from radiating the chattering noise. Solid state regulators are fairly quiet, but aluminum foil over the plastic cap may help. You might also try a .2 microfarad, 200-volt capacitor to the leads of older voltage regulators, BUT NEVER BYPASS THE FIELD LEAD BETWEEN THE ALTERNATOR OR GENERATOR WITH THIS CAPACITOR. STAY OFF THE FIELD LEAD!

Q. When I rev my engine, I hear a singing noise that comes through even when my mobile antenna is disconnected. Is this the alternator?
A. Probably so. Alternator noise is easily identified by the musical whine it generates, and this noise comes from the typical 3-phase, 14-pole AC alternator with a DC field and a 6 diode, fullwave bridge rectifer circuit built in. The noise is greatest when the alternator is charging the most--and it will taper off as your battery becomes full. A 60-amp low-pass filter in series with a heavy alternator output lead should work. This filter is a pi section, LC, low-pass filter with low lead inductance, rated at 60 amps from 6 to 115 volts AC or DC.

Electronic tachometers may also generate noise similar to alternator noise. Although this usually comes in the antenna circuit, it sometimes will creep into your DC leads. Tachometer filters are a low-pass RC filter which won't load the ignition circuit with additional capacitance, yet passes enough signal to operate the tach.

Q. My mobile and home florescent lights completely tear up short-wave reception. What can be done to filter out florescent light noise?
A. Turn them off. The noise is radiated directly from the florescent chopper circuitry to your antenna system. Mobile and portable florescent lights are the worst offender unless they have been specifically designed (and advertised) as low-noise output. Florescent light interference is greatest below 10 MHz and seldom effects scanners. However, to shortwave and worldwide ham sets, florescent lights will kill weak signal reception.

Q. What can be done about the frying noise from nearby power lines that comes over my shortwave set as well as my scanner receiver on low band?
A. Contact your power company and see if they can put you on their agenda for an insulator wash-down. You might also pray for dry weather after a big rain storm. This washes off the dirt on the insulator that creates a conductive path for the high voltage to "fry" to ground. The power companies use non-conductive deionized water to wash down the insulators. Never attempt to hose down the insulators yourself--you could be fried on the spot.

The following companies produce noise elimination filters for specific types of EMI. Write for their catalogs. Then try to pinpoint your own source of noise interference. Use the specialized filters to clean up your reception.

Pacific Accessory Corporation
3613 W. MacArthur Blvd., #603
Santa Ana, CA 92704

Marine Technology
2722 Temple Avenue
Long Beach, CA 90806

Tecknit
320 N. Nopal Street
Santa Barbara, CA 93103

# BEGINNER'S CORNER

**If you are new to monitoring or have a question about something you don't understand, please write to me at the address given below, and I'll try to answer you. When posible, your questions and answers will be printed. For those who wish an immediate reply, please send a self-addressed, stamped envelope.**

**John P. Leth-Nissen, Rt. 1, Box 101, Benton, KS 67017**

YOUR MAILBOX: As promised, this month comes directly from input to your mailbox. All inquiries receive a personal and somewhat more detailed response and those items of general interest later find their way into print. Beginner's Corner emphasis is to provide general information that avoids high tech jargon and theoretical math. Explanations are therefore based on tangible comparisons meant to provide a real world understanding of the hobby. YOUR cards and letters are the best barometer of what BC should be about, so keep them coming.

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INQUIRY: PA-225 volunteers a topic, which as he states, "...many beginners as well as 'old pros' might someday encounter themselves." "Signal loss is a very important factor when installing an antenna along with cable distances and proper matching of antenna, cable and scanner." He would like to use a low loss cable RG6 (75 Ohm impedance) with an antenna and scanner specd. at 50 Ohms. "Will the mismatch of 25 Ohms degrade the incoming signal to noticeable losses?"

RECIPROCAL THEORY OF ANTENNAS: There is a long established theory that any antenna is equally suited for both transmission and reception within its designed bandwidth. Probably as an extension of this (true at first approximation) theory, a great number of technical types rush to apply some of the strict transmit criteria to receive-only antenna systems. While it is undoubtedly true that an optimum setup will result, there is little practical ($ & sense) justification for the added expense. NOTE: TECHNICAL TOPICS, April 87 Newsletter, provides an excellent discussion of various cable types and characteristics -- Must reading.

IMPEDANCE MATCHING: This requirement, based upon the 'Maximum Power Transfer Theorem' is very critical in rf power transmission systems. A significant mismatch will, at best, result in severe loss of transmitted signal and can degrade or destroy the high power output section of a transmitter. Most Receiving systems will accomodate a 25 Ohm mismatch without appreciable signal loss and there is no possibility of damage to the receiver.

MATCHING BALUN???? Does anyone out there know of a source for 50-75 Ohm matching transformer? I have yet to find such a device and don't know of any technical reason for its conspicuous absence from the marketplace?

PRACTICAL CHOICES: For short cable runs (50' or less) and the highest frequencies of interest approaching the 512 MHZ range, RG58U is a good choice for a 50 Ohm system. As frequencies increase beyond the 500 MHZ 'T' Band, line losses become progressively critical. For longer runs and/or higher frequencies "LOW LOSS" cables should be considered. RG6 (75 Ohm) is about the same thickness as RG58 which facilitates installation and provides a quality solution at about .14/ft. RG213 (50 Ohm) would be the no-compromise choice coming in at around .33/ft. Only drawbacks to this premium low loss cable are cost and thickness. RG8 (50 Ohms) is comparable to the RG213 in thickness, price and loss specs. While RG8 runs a very close second to RG213, it has the advantage of being much more readily available.

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INQUIRY: MO-89 is looking to upgrade to a 800 MHZ scanner and puts forth two important questions. "Why do you need two antennas for 800 MHZ scanners and how do you use two antennas at once?

A viable analogy for understanding antenna design is to imagine yourself going out into a sandstorm with the need to collect a particular sized grain of sand. If you were to erect a screen whose mesh was just about the size of the grains you wanted to collect, you would have a well designed solution. Smaller grains would pass through the screen and larger grains would bounce off. The ones you wanted would be lodged in the screen.

Radio frequency waves also come in a variety of sizes (wavelengths) and so for any given frequency, there is a single best receiving element length. As radio technology was evolving at lower frequencies it was physically impractical to build a full wavelength antenna (eg. 27 MHZ = 35 ft.), so early designs used the next best approach, elements at exact fractional increments of one wavelength. The quarter wave antenna is to this day the standard for gain against which all other antennas are compared.

Before finally moving to the answer, there is another side of gain that should be mentioned. At full wavelength an element is very much like the sand screen. It selectively accepts a particular (center) frequency and varies in attenuation (rejection) of all others. The graphic representation for gain is the familiar bell shaped curve showing high gain in a range (bandwidth) approaching the center frequency. That is to say, the ratio of signal to unwanted noise peaks around full wavelength center-frequency. This is true to a close approximation for fractional wave elements as well.

ANTENNA BANDWIDTH requires that the element(s) be of specific lengths, such that for each range of frequencies, the receiving element be a precise fractional or integral length of the center-frequency in that range. A given element can simultaneously be a full, 5/8, 1/2, 1/4 wave etc. antenna for multiples of center frequency. In conclusion **when wide band scanners made the jump to 800 MHZ it was no longer a practical matter to stay with a single element antenna.** While there are are other contributing phenomena (TECH TOPIC DOMAIN), it is safe to say that 30-512 MHZ compromises just wouldn't stretch to the 800 MHZ region.

USING TWO ANTENNAS AT ONCE? The scanners you are looking at come with two back of set antennas and at least one has two input jacks for external antennas. Be assured that you will find provisions for simultaneous mounting both back of set antennas and be able to continuously scan all ranges. You didn't ask about external antenna hookup, but as you may consider that down the road, so here is a brief rundown.

For those who would like to use a second external antenna optimized for 800 MHZ (possibly a beam) the second input is a nice feature. However, if you are not thrilled with the prospect of an antenna farm, the second input is only a minor aggravation. There are a number of multi-element ultra wideband antennas available that give good coverage. To get into the dual inputs from a single antenna line, a TV antenna-to-Two set coupler and a couple of interconnect jumper cables will do the job. NOTE: Be sure the coupler is specd. to operated at UHF (not all are). There are more exotic couplers available from communications suppliers, but the TV couplers are typically less expensive and a whole lot easier to come by.

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INQUIRY: CO-055 provides the following queries: "I have a metal roof. If I install an external antenna against the house will the metal have effects to reception or ground plane? And what is a ground plane? Call signs are interesting and complex....any way to decode these to give a hint to what I may be listening to?"

Antennas are most definitely affected by their proximate environment. Most monitoring antennas 30-800 MHZ have vertical polarized elements

and some form of ground plane system. The single most common interference problem associated with this design is the called '60 Hertz Buzz' or electrical line noise. This phenomena is most prevalent in the amplitude modulated receiving mode when an antenna is in close proximity to high voltage electrical transformers and/or high voltage transmission lines. These sources have a constant frequency (60HZ plus/minus one cycle in a blue moon) but can have substantial transient voltage fluctuations (spikes). When intelligent variations in voltage amplitude are imposed on a constant frequency you have a sucessful definition of AM radio. When your antenna couples 60HZ spikes you have unwanted noise and a prime example of environmental interaction. FOR SAFETY SAKE antenna installations must be spaced from electrical transmission lines in such a way that they could never come in contact with or fall into contact. For sanity sake, they should not be in the same elevated plane as transmission lines or transformers.

A metal roof in close vertical proximity to a receiving antenna can very possibly create a healthy dose of havoc. Reflected rf energy causing noise and time delayed images (like TV ghosts) and frequency altered information (like scrambles) are among the possibilities. For this reason, the base of your antenna should be at least ten and preferably twenty feet or more above the peak of the metal roof. Mast and antenna must be properly grounded and lightening protection measures should be considered.

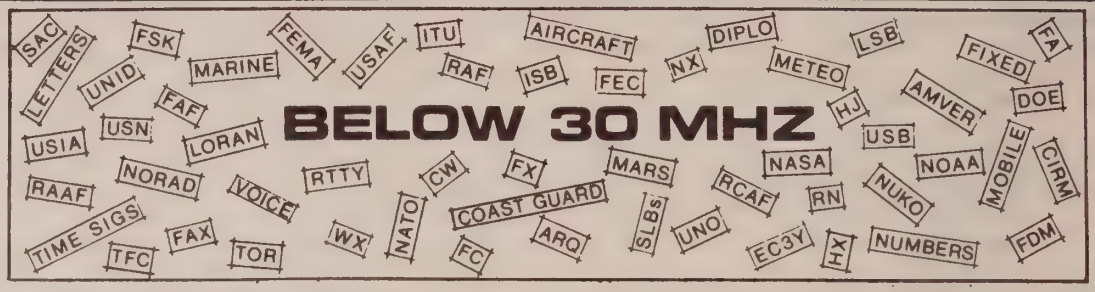
A brief tidbit about ground planes. By way of analogy, energy can only be detected or measured with respect to some arbitrary, but fixed point of reference. The electro/magnetic energy emanating from a transmitter is a series of timed pulses (alternating positive and negative voltages) centered at zero volts (earth ground potential). The horizontal radials, or some other electro/mechanical grounding system, provides your receiver with a stable reference point for measuring (detecting) variations in potential across the antenna's receiving elements. By way of comparison, birds landing on high voltage transmission lines 'float' at line potential with no ill effects. If they simutaneously contact a ground return line they complete a circuit and join their ancestors. The ground referencing in your antenna system similarly makes it possible for your receiver to detect micro-volt rf pulses in your antenna. By variations in design there are several other nice things the ground plane systems does, notably smoothing wave transition and impedance matching, but the reference notion is the most important for general understanding.

CALL SIGNS provide proof positive that you are monitoring a particular licensee and little if any additional information. While there have apparently be periodic efforts to impose information value on these alpha-numeric handles, few if any valid generalizations can be made. Historically systems west of the Mississipi have the prefix 'K' while those east are prefix 'W'. For comercial broadcasters (AM-FM-TV) call signs for primary transmitters are typically 3 or 4 letters. Repeater systems are sometimes identified by the suffix 'RP'. Until very recently, 1979, any user expanding or enhancing his system often picked up a new license and call sign to cover the changes. A single user could and did end up with quite an assortment of ID's for what might well have been a single intergrated system. The effort to consolidate systems under one call sign is moving forward, but only time will determine if this new direction will be followed to completion. KS36

## FREE TWO MONTH MEMBERSHIP EXTENSIONS

RCMA is offering to EXTEND the membership of any current member who submits a black and white photograph and the photo is selected and used for the NEWSLETTER cover! If you are a good amateur photographer, this is your chance to get your photo printed on the cover of our nationally distributed RCMA NEWSLETTER! And, in exchange for using your photograph on the cover, we will EXTEND your membership for two months for each photograph used on the cover!

The photograph must be related to our hobby of communications or to the subjects covered by our monthly columns. All photos become the property of RCMA and NONE will be returned. You, the member, must be the photographer. Full details on how to get your photograph considered are available by sending a stamped business size envelope to Hugh Stegman, RCMA, 4354 Coolidge Avenue, Los Angeles, CA 90066.




**This column is for HF AM, CW, SSB,RTTY and FAX reception reports, notes, articles, and questions related to HF utilities. Services covered in this column include aeronautical, coastal/marine, weather, government, military and 'spy' stations—essentially everything except broadcasting, CB and amateur radio.**

**Hugh Stegman, 4354 Coolidge Ave, Los Angeles, CA 90066**

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FADE IN

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Greetings!

When I was in the film business, I heard much about the pitfalls of following a class act. Well, that's about what I've decided to do here, as I have been an avid reader of Below 30 MHz for a number of years. There are not many acts around that are harder to follow than Bob Horvitz, an artist and intellectual who practically single - handedly saved us from the E.C.P.A. hysteria last year, or Geoff Halligey, one of the world's leading experts on utility monitoring. I sure hope you two guys will contribute to my effort in this area. I can use the expertise!

I'll skip the bio section, since everyone probably knows me from the user-friendly and intrepid Photo Department. I'll just note (again) that the cover photo project continues as before, and I will still be looking for the usual b&w, 5x7 or larger, sharp and well composed pictures for the cover of this newsletter. Those used will continue to earn their submitters the 2 month membership extension. The address ought to be up above; send 'em in!

My experience with HF goes back to age 9 or so, when I used to (surreptitiously) find all sorts of good wierdness on my father's enormous Hallicrafters SX-62. This lasted until the night the dial cord broke and he returned home to find it stuck on 1730 KHz LAPD! (Yes, this was a few years ago, though LAPD simulcasted there until the mid-60's.) But I went on to get a ham license (I am currently NV6H). I do most of my utility listening on a Drake R4-B with the rare and hard-to-find FS-4 synthesizer that makes it a general coverage set. Yes, I also inherited the Hallicrafters, which I am still restoring. With the original R-42 bass reflex speaker sitting on the floor, foreign broadcasts have to be heard to be believed!

My other primary interest is in computers, and I have started a number of files for various frequency loggings. There are now several thousand on several disks, so send me your frequency questions and I'll see what comes up. I also do quite a bit of telecommunications. CompuServe users can write me at 71460,2270. There are several good radio BBS's now, which I hope the new computer editor will discuss soon.

This naturally brings us to the usual comments on the RCMA Newsletter. Like all the columns, this one is written by the members. Send in all utility loggings, notes on radio services, tales of intrigue (<u>especially</u> those!), ideas on books you've seen, war stories or anything else at all that is relevant to HF listening and that isn't oriented to international broadcast DX'ing.

I am going to bend the rules a bit and include clandestine broadcasting. This is a wild and exciting area of international politics that deserves more attention from RCMA. Especially needed are any ideas from those with the linguistic expertise to pick up on accents, dialects, or anything else that can unravel whose side these stations are on. Nothing is what it seems, and often one side will try to imitate another, right down to fake ID's. The recent situation of a clone Radio Venceremos in El Salvador, undoubtedly US-backed, comes to mind.

I'm also going to bend the frequency limits a bit and include the transition zone up to 34 MHz or so. You may have heard Spanish on low band scanner channels lately. This is transequatorial skip, and it is strong regardless of solar activity (mysteriously enough). This is another wild and wooly "grey area" where the usual rules don't always hold, and thus it gives some of the puzzles that most veteran utility listeners love to unravel. Remind me to recount the weird tale of "Godzilla" on 33.475 sometime... or ask Mike Britt... (hint, Mike... hint...)

Those who've read this far are probably already into HF monitoring. But those who aren't, or who haven't fired up the R-1000 lately, are missing some real strange fun. Propagation is literally electric weather; it is never the same two days in a row. At the same time, the demand for spectrum space is beginning to resemble that for Los Angeles real estate, and the rules set down by the sober gents in Geneva don't always hold up out on the bands. Imagine your local PD suddenly turning up on the sewer inspector channel (or does it anyway?), and you get some idea of the normal situation "down under" on HF.

In a word; contribute! NOTHING is too basic or too weird (<u>especially</u> not too wierd; not here!). Send it in...

<u>Propagation</u>:

Ordinarily, a column with a 2-month lead time is useless for propagation observations, because they will be hopelessly outdated before anyone sees them. But just let me note in passing that today's solar flux was 98, and that the 10 meter amateur band has been open to South America daily for a week. Look for conditions to swing wildly between good and rotten, as centers of solar activity move across the sun in its 28-day rotation period. The new cycle has officially begun, and already the frequencies above 10 MHz are becoming useful more of the time. Look for the center of utility action to shift upwards accordingly. Put up that new antenna, and start looking. Band conditions will improve rapidly for the next several years.

<u>Mexican bootleggers</u>:

One interesting phenomenon here in L.A. is the appearance of several very strong USB Spanish-language nets every day during business hours. Callsigns are unheard of (or irrelevant), and the traffic is rather dull lists of numbers. These guys seem to know what they are doing, with good net discipline and slick procedures. Place names include Tijuana, and other areas near the U.S. border.

Here are some typical intercepts, with dates first logged:

| KHz | Station/ signal type | Date | UTC |
|---|---|---|---|
| 6580.0 | SS/ 2 OM's/ whistles | 01/21/86 | 1608 |
| 6687.0 | SS/ 2 OM's/ 2 YL's | 01/08/86 | 0517 |
| 6735.0 | SS/ 2 OM's | 01/21/86 | 1631 |
| 6787.0 | SS/ OM/ 2 YL's | 01/21/86 | 1623 |
| 6818.0 | SS/ 2 OM's/ 1 YL | 01/10/86 | 1700 |
| 6860.0 | SS/ OM/ Number lists | 01/22/86 | 1559 |
| 6932.6 | SS/ 2 YL's | 01/21/86 | 1642 |
| 7628.0 | SS/ YL/ Number lists | 01/21/86 | 1702 |
| 7729.5 | SS/ OM's | 01/21/86 | 1651 |

| | | |
|---|---|---|
| 10126.0 | SS/ OM/ YL | 07/10/85 2215 |
| 10148.0 | SS/ OM/ YL | 07/10/85 2215 |
| 10151.5 | SS/ OM/ YL | 07/10/85 2215 |

Note that all these nets are on simultaneously; they do not move around. After a while, it is easy to identify certain individuals. I doubt that drug smugglers would be this open about it, or need to pass this much traffic (although there are exceptions). Perhaps these are just business people using good amateur transceivers bought in Los Angeles, without the benefit of licenses. Anybody have any ideas on these guys?

Well, that's all the space. Send contributions. This is gonna be FUN!!!

# BUSINESS, ETC.

**This column is for reporting frequency and radio system information for the following services: business, forest products, petroleum industry, special industrial, manufacturers, motion picture industry, security (private patrol, detective agencies, campus security & police, amusement park & stadium security, shopping center & mall security, plant/business/hotel security, etc.), General Mobile Radio Service (GMRS), mobile phone/RCC & paging, trucking firms, bus lines, taxi cabs, tow trucks, utility companies (private & municipal water, power, electric, gas, telephone, etc.) and all school & college related frequencies.**

**Send business monitoring information <u>west of the Mississippi</u> to:**
**Cliff Polkinghorn, 2580 Parkside Drive, Union City, CA 94587**

WELCOME TO BUSINESS WEST--AUGUST 1987-
THIS MONTH WE HAVE QUITE A FEW CONTRIBUTIONS TO SHARE. WE WILL START WITH CHRIS ELLIOTT OK-31

MANUFACTURING & INDUSTRIAL RADIO FREQUENCIES

| | |
|---|---|
| 153.080 | SHEFFIELD STEEL CORP. (SAND SPRINGS) |
| 153.080 | KERR- McGEE NUCLEAR (GORE) |
| 462.275 | KERR- McGEE NUCLEAR (GORE) |
| 153.110 | ROCKWELL INTERNATIONAL |
| 153.320 | ROCKWELL INTERNATIONAL |
| 462.300 | ROCKWELL INTERNATIONAL |
| 462.425 | ROCKWELL INTERNATIONAL |
| 462.525 | ROCKWELL INTERNATIONAL |
| 153.200 | McDONNELL-DOUGLAS |
| 462.325 | McDONNELL-DOUGLAS |
| 153.230 | INDUSTRIAL FABRICATION |
| 153.245 | C-E INVALCO |
| 153.335 | C-E INVALCO |
| 153.275 | T.D. WILLIAMSON INC. |
| 153.350 | BRADEN STEEL CORP. |
| 462.175 | BRADEN STEEL CORP. |
| 462.250 | BRADEN STEEL CORP. |
| 158.295 | C-E INVALCO |
| 158.430 | McELROY MFG. INC. |
| 462.200 | FORD COMMUNICATIONS |
| 462.375 | FORD COMMUNICATIONS |
| 462.275 | SUN SERVICES CORP. |
| 462.300 | GEOSOURCE |
| 462.450 | HILTI INDUSTRIES INC. |

THANKS CHRIS

NEXT, WE HAVE SOME INFO FROM RORY CASLOO8, HE TELLS ME THIS INFO IS NOT AVAILABLE IN ANY OTHER FREQ. GUIDES.

| | | |
|---|---|---|
| 461.150 | BOMAR INVESTIGATIONS | SANTA MARIA |
| 461.750 | OVERLAND INVESTIGATIONS | SANTA MARIA |
| 463.375 | BOYD & ASSOC. SECURITY | SANTA MARIA |
| 464.525 | SANTA MARIA TOWN CTR. MGMT | SANTA MARIA |
| 467.0875 | AIRPORT HILTON INN SECURITY | SANTA MARIA |
| 461.550 | WEAVER SECURITY PATROL | OXNARD |
| 461.275 | DIAL SECURITY PATROL | CAMARILLO |
| 462.675 | PARENT SECURITY SERVICE | OXNARD |

| | | |
|---|---|---|
| 461.375 | THE OAKS MALL SECURITY | THOUSAND OAKS |
| 464.475 | CENTER POINTS MALL SECURITY | OXNARD |
| 461.625 | COURTESY SECURITY | THOUSAND OAKS |
| 464.975 | CAVAZOS ENTERPRISES INC. GUARD COMPANY | THOUSAND OAKS |
| 154.540 | WESTLAKE PATROL SECURITY | WESTLAKE |
| 154.600 | PROCTOR & GAMBLE PLANT SEC. | VENTURA |
| 464.750 | EVEREST & JEANINGS PLANT | CAMARILLO |
| 461.500 | CAL-AMERICAN PROTECTION SVC. | SIMI VALLEY |
| 151.625 | NEW CONCEPT PROTECTION SVC. | VENTURA |
| 151.775 | THE ESPLANADE MALL MGMT | OXNARD |
| 151.655 | BUDDY SALES ELECTRONIC SVC. | VENTURA |
| 464.875 | LEISURE VILLAGE SECURITY | CAMARILLO |
| 31.240 | JIMS EMERGENCY TOWING | CAMARILLO |
| 152.270 | YELLOW CAB DISPATCH | OXNARD |
| 157.530 | YELLOW CAB MOBILE | OXNARD |
| 152.450 | YELLOW CAB DISPATCH | VENTURA |
| 157.705 | YELLOW CAB MOBILE | VENTURA |
| 463.700 | HOME MOTORS TOWING | SANTA MARIA |
| 150.860 | OLIVERS TOWING SVC. | SANTA MARIA |
| 461.750 | (SHARED) CITY MOTORS TOWING | SANTA MARIA |
| 462.950 | SANTA BARBARA TIMES NEWSPAPER | SANTA BARBARA |

THANKS RORY

NOW WE HAVE SOME INFO FOR THE STOCKTON AREA OF CALIF.
PROVIDED BY LAVERNE (# UNKNOWN)

| | |
|---|---|
| 155.895 | TRACY DIAL A RIDE |
| 48.340 | BANTA IRRIGATION DISTRICT |
| 155.175 | LINCOLN SCHOOL DISTRICT |
| 48.60 | NAGLEE BURK IRRIGATION |
| 155.205 | NEW JERUSALEM SCHOOL |
| 151.895 | SAN JOAQUIN DELTA COLLEGE MAINT. |
| 154.025 | SAN JOAQUIN MAD |
| 451.250 | STOCKTON E. WATER (48.10) |
| 48.44 | SO. SAN JOAQUIN IRRIGATION DISTRICT |
| 151.745 | UNIVERSITY OF THE PACIFIC |
| 47.84 | WEST SIDE IRRIGATION DISTRICT |
| 460.900 | CENTRAL ALARMS (460.975) |
| 463.700 | A.A.A. SECURITY STOCKTON |
| 151.745 | UNIVERSITY OF PACIFIC "POLICE" |
| 460.1625 | SAN JOAQUIN DELTA COLLEGE "POLICE" |
| 460.2875 | SAN JOAQUIN DELTA COLLEGE "POLICE" |
| 154.830 | PORT OF STOCKTON "POLICE" |
| 464.925 | CECILS SECURITY (S.U.S.D. POLICE) |
| 161.730 | KGNR AIRWATCH |
| 170.150 | KTRB MODESTO |
| 450.450 | KOVR CH-13 |
| 455.950 | KOVR CH-13 |
| 44.150 | KCRA CH-3 |
| 173.225 | STOCKTON RECORD |
| 173.375 | STOCKTON RECORD |
| 173.275 | STOCKTON RECORD |
| 451.350 | PAC BELL |
| 452.575 | CAL STATE AUTO ASSN. |
| 463.225 | STOCKTON BUS |
| 453.225 | STOCKTON TRANSIT |
| 452.800 | STOCKTON TRANSIT |
| 464.650 | STOCKTON MOBILE OPERATOR |
| 47.10 | STOCKTON TRANSPORTATION |
| 152.390 | TAXI (YELLOW & SERVICE) |
| 152.300 | STOCKTON CITY CAB DISPATCH |
| 157.560 | STOCKTON CITY CAB MOBILE |
| 151.985 | PAC BELL |
| 451.300 | PAC BELL |
| 158.745 | PORT OF STOCKTON OPS |
| 155.865 | PORT OF STOCKTON WAREHOUSE |
| 155.715 | DIAL A RIDE ESCALON |
| 46.00 | ESCALON SCHOOLS |
| 155.265 | LODI SCHOOLS |
| 155.295 | MANTECA SCHOOLS |
| 154.025 | SAN JOAQUIN MOSQUITO ABATEMENT LODI/STKN |

Thanks, LaVerne. That's it for this month. I am looking forward to next month's contributions. We will also continue with the Hawaii list.

Cliff

**Send business monitoring information east of the Mississippi to:**
**Brandt Niemuth, P.O. Box 541, Rosemont, IL 60016**

Welcome. As promised here is the start of the major contribution from fellow editor Dave Wilcox for the State of Wisconsin;

| | | | |
|---|---|---|---|
| 154.625 | KXC 490 | Mercy Hospital | Janesville |
| 155.265 | KBA 407 | Sayre Bus Co Inc | Milton |
| 157.68 | Beloit Corp Inc | | Beloit |
| 157.74 | KVW 788 | General Motors Research | Janesville |
| 158.1 | KUC 854 | Wisconsin Communications | Footville |
| 158.385 | KZV 917 | Donald Frank Inc | Milton |
| 158.7 | KSV 995 | Curtin Call Communications | Janesville |
| 160.2 | Roadway Express Inc (KNGN594) | | Janesville |
| 451.125 | KSA 377 | Rock County Electric | Janesville |
| 451.4 | KTO 253 | Wisconsin Telephone | Janesville |
| 451.7 | KNBM595 | Cities Service Company | Janesville |
| 451.9 | KLI 570 | Seneca Foods Corp | Janesville |
| 454.225 | KPB 344 | Beeper Service Inc | Janesville |
| 461.3 | KNFZ935 | Care-A-Van of Rock County | Janesville |
| 461.5 | KNCT942 | Steves Body Shop | Beloit |
| 461.5 | KNEQ553 | Doric Distributors | Beloit |
| 462.1 | WXL 751 | Govert Bros Well Co | Janesville |
| 462.175 | KWH 681 | Total TV | Janesville |
| 462.775 | Beloit Box Board Co (KKH 325) | | Beloit |
| 463.25 | KWK 411 | Carl's Shell | Janesville |
| 463.475 | WQR 936 | Wurtz Mobile | Janesville |
| 463.475 | | Caddy Cab | Janesville |
| 463.675 | KNFS951 | Martin Security Inc | Janesville |
| 464.000 | KNCB250 | Alco Bus Corp | Janesville |
| 464.000 | KNAY440 | Gardner Sales Inc | Janesville |
| 464.000 | KNBN286 | Steves Plowing & Tow | Janesville |
| 464.000 | KNEA996 | Stokely-Van Camp Inc | Janesville |
| 464.000 | WQE 803 | Roger Rebout | Janesville |
| 464.05 | KNFS604 | Treuthardts Auto Repair | Janesville |
| 464.075 | WCV 390 | Coca Cola Bottling | Beloit |
| 464.275 | KWY 314 | Scharine's Farm System | Janesville |
| 464.275 | KXE 667 | Dick Davis Citco Service | Janesville |
| 464.275 | | Evan's Radio Service | Janesville |
| 464.475 | KGM 512 | American Television | Janesville |
| 464.5 | | Sherex Chemical Co | Janesville |
| 464.775 | KZY 891 | Beloit College | Beloit |
| 469.925 | KB20866 | Janesville Brick | Janesville |
| 31.32 | KUE 310 | Zed Inc | Janesville |
| 35.06 | KWS 417 | Quigley Smart Inc | Janesville |
| 35.08 | KWS 417 | Quigley Smart Inc | Janesville |
| 35.08 | KBW 502 | Quigley Smart Inc | Beloit |
| 35.88 | KNFX387 | Rudys Welding | Milton |
| 35.9 | KNAI484 | Wiedmer Trucking | Clinton |
| 37.6 | KUH 730 | Wisconsin Power | Beloit |
| 37.78 | KSB 520 | Wisconsin Power | Janesville |
| 37.78 | KUI 889 | Wisconsin Power | Janesville |
| 37.78 | KSD 571 | Wisconsin Power | Beloit |
| 43.04 | KFK 327 | Rock Road Construction | Beloit |
| 43.12 | KSG 302 | Ryan Inc | Janesville |
| 43.52 | KRZ 397 | South Central Irrigation | Beloit |
| 47.46 | KSD 727 | Evansville Veterinary | Evansville |
| 47.54 | KSC 339 | Clinton Veterinary | Clinton |
| 48.24 | KBG 461 | Wisconsin Power | Beloit |
| 48.24 | KBB 805 | Wisconsin Power | Milton |
| 48.32 | KBB 805 | Wisconsin Power | Milton |
| 48.36 | KBB 805 | Wisconsin Power | Milton |
| 48.52 | KFV 510 | Wisconsin Gas Co | Evansville |
| 48.9 | KBX 596 | Michigan Wisconsin Power | Janesville |
| 49.52 | KUR 948 | Janesville Sand & Gravel | Beloit |
| 49.52 | KSF 571 | Janesville Sand & Gravel | Janesville |
| 49.58 | KBJ 495 | Edgerton Ready Mix | Edgerton |
| 150.845 | KSG 744 | Dewey's Wrecker | Beloit |
| 151.565 | KLX 216 | Lions Oil | Janesville |
| 151.595 | KBA 276 | Arneson Gerald | Janesville |
| 151.625 | KNGR287 | Total TV | Janesville |
| 151.655 | WZH 573 | Lenz Plumbing & Heating | Janesville |

| | | | |
|---|---|---|---|
| 151.715 | KLT 801 | Amoco Oil Co | Janesville |
| 151.715 | KYX 266 | Perkins Camera & Audio | Janesville |
| 151.715 | WSM 840 | Bratten Oil | Janesville |
| 151.715 | KVQ 581 | Pepsi Cola Kantor Bottling | Beloit |
| 151.745 | KLC 565 | Westphal & Co | Janesville |
| 151.805 | KTO 996 | Lloyd's Plumbing | Janesville |
| 151.865 | KGW 851 | Kubiaks Electronics | Janesville |
| 151.985 | KJL 490 | Wisconsin Telephone | Janesville |
| 152.12 | KSV 997 | Metro Radiophone | Janesville |
| 152.81 | KSC 646 | Wisconsin Telephone | Janesville |
| 152.93 | KNIA847 | Frank Sila & Sona | Janesville |
| 153.065 | KC 6699 | Omc Parts & Accessor | Beloit |
| 153.32 | KBS 258 | General Motors Research | Janesville |
| 153.35 | KRJ 599 | General Motors Research | Janesville |
| 154.49 | KET 777 | Lein Oil Co | Janesville |
| 154.515 | KZZ 318 | Phil's Refrigeration | Janesville |
| 154.54 | KNFA256 | Beloit Memorial Hospital | Beloit |
| 154.54 | KTY 555 | Janesville City of (School) | Janesville |
| 154.57 | KTY 555 | Janesville City of (School) | Janesville |
| 154.57 | KA83876 | Marling Lumber Co | Janesville |
| 461.525 | KUT 641 | ABH Inc | River Falls |
| 463.775 | KNEA987 | Air Communications | River Falls |
| 461.225 | WSD 681 | Brave Harvestore Inc | River Falls |
| 154.4637 | KNDT845 | Dairyland Power Co | River Falls |
| 154.4637 | KNFH633 | Dairyland Power Co | Spring Valley |
| 451.025 | KOK 429 | Dairyland Power Co | Spring Valley |
| 464.2 | KNCT631 | Dick Godden & Son Excavat | Ellsworth |
| 464.2 | WQL 456 | Ellsworth Farm Service | Ellsworth |
| 463.7 | KNAG753 | Ellsworth Farmers Union | Ellsworth |
| 461.525 | KNEA831 | Equity Co-Op Elevator | River Falls |
| 152.51 | KJU 798 | Hager City Telephone | Hager City |
| 152.54 | KJU 798 | Hager City Telephone | Hager City |
| 461.525 | KNBC742 | Holst Construction | River Falls |
| 461.525 | WSX 560 | Home Appliance & TV | River Falls |
| 464.2 | KNBI720 | Hoyer Bros Well | Ellsworth |
| 461.225 | KNFR986 | Gary Klund | River Falls |
| 461.525 | WXE 207 | L W Sullivan Co | River Falls |
| 461.975 | WYS 392 | Motorola C & E Inc | River Falls |
| 461.225 | KNHP357 | Murtha Brothers | River Falls |
| 464.2 | KNBR468 | Nelson Electric & Heating | Ellsworth |
| 153.455 | KSC 749 | Northern States Power | Elmwood |
| 153.455 | KSC 749 | Northern States Power | Spring Valley |
| 153.5 | KSC 749 | Northern States Power | Elmwood |
| 153.5 | KSC 749 | Northern States Power | Spring Valley |
| 153.635 | KSC 749 | Northern States Power | Spring Valley |
| 464.2 | WQF 686 | Prescott Insurance | Ellsworth |
| 461.225 | WXA 691 | Realty World Inc | River Falls |
| 461.225 | KNFJ664 | River Falls Skelgas | River Falls |
| 461.525 | WSD 203 | Roberts Woodworking | River Falls |
| 461.225 | KNFK659 | Rohl & Timm Excavating | River Falls |
| 461.525 | KNEG203 | Leo H Rohl | River Falls |
| 464.2 | KNDE939 | Bill Schumaker | Ellsworth |
| 461.525 | KNCV 729 | Sukowatey Realtors | River Falls |

# CANADA

**Send Canadian frequency information, radio system details and other information relating to Canadian monitor listening and questions to:**

**Rob Berezowski, 310-4045 Rae St, Regina, Saskatchewan, Canada S4S 6Y8**

Greetings once again and welcome all to the August Canada column. I hope everyone out there is well, and that summer is treating you well. Lots of pretty girls out in the park. Oops, almost forgot, business before pleasure!

My first letter this month is from John "J.D." (CANA-105). J.D. sent in a variety of material and clippings. One of the newspaper

clippings came from the Toronto Star on February 16, 1986 and discusses a proposal made by the FCC for a new consumer radio service. This system would be a cross between a walkie-talkie and a telephone, allowing people to hold private wireless conversations across short distances. The commission engineers believe that these "consumer radios" would be used to talk across shopping malls, football stadiums, or while travelling in separate cars on the highway for example. The FCC hopes the radios will be on the market in about two years, and with a pricetag around $50 to $80.

Each radio would have a unique address, so messages would only be sent to the designated receiver. The consumer radio will signal when a message is being received, and the speaker audio will only carry messages directed to that radio. This contrasts sharply with CB radio in that the CB user must continuously listen to a channel to be sure of not missing a call. The consumer radio system will use computer technology to find an unused channel, and to signal the appropriate receiver.

The newspaper clipping does not mention what frequency band these devices will use, so it is anyone's guess. This story probably belongs in one of the U.S. columns, but the way I see it, whenever radio products or systems are introduced in the US, it is only a matter of time before they appear in Canada.

Another article sent in by J.D. is on the subject of voice dialed cellular telephones. The newspaper article appeared in the Vancouver Sun on May 3, 1986. AT & T has unveiled its 1280 cellular telephone unit, which is designed to recognize the speech patterns of the caller for up to 20 phone numbers. After speaking a code name (for example, John Doe), the telephone automatically scans its memory of previously programmed speech patterns to attempt to find a match. Once a match is made, the telephone automatically dials the appropriate number. Teaching the telephone to recognize the speech pattern is not difficult, it merely means speaking into the unit and identifying the desired number for that particular word (or words). Unfortunately the telephone will only respond to the voice that programmed the unit.

In contrast, a unit being sold by British-based FCA Telecom (in its first US venture) will include a voice recognition circuit that will respond to virtually any voice that pronounces one of its programmed identifying names - for example, home, cleaners, airline, office. I do have one question that the newspaper article does not mention: when dialling a call, does one have to pronounce the identifying words with a British accent?

Another article J.D. sent in appeared in the Toronto Globe & Mail on June 30, 1986, and alleges that international air flights over the North Atlantic through the Gander Oceanic Control Region are being jeopardized because the radio operators are being overworked, and this has resulted in instructions being passed along to the wrong aircraft. Because the Gander Oceanic Control Zone is outside of land-based radar and VHF radio coverage, the radio operators at Gander must rely on position reports from the pilots relayed on HF radio. The allegations are being made by Ernest Reid, one of the operators and president of the Gander local of the Canadian Association of Professional Radio Operators.

There are 54 radio operators employed at Gander, and they direct messages to and from pilots via HF radio to aircraft outside a 320 kilometre radius of the Gander airport. These operators co-ordinate search and rescue action; convey information to authorities relating to bomb threats, hijack attempts, or medical emergencies; pass along weather and safety information; and relay air traffic control instructions to the aircraft. The operators daily handle about 3,000 messages. Transport Canada has decided to reduce the complement of operators from 54 to 49.

The union alleges that the heavy workload and low morale are causing the operators to make errors. Two examples given include one case where Scandinavian Airlines 911 was instructed to climb 1200 metres. That message was meant for Scandinavian 901. In the other case, Lufthansa 440 was cleared to climb. The pilot caught the error because his aircraft was already at that altitude. The message was meant for Lufthansa 420. Both incidents occured during the same month.

Transport Canada spokesman David Austin says the department is aware of both incidents, and says safety was not compromised in either

case. Such incidents are generally caused by human error and are reviewed by Transport Canada to determine whether disciplinary or corrective action is necessary.

Mr. Austin says that the union claim that these incidents are the result of overwork is false. "We've reduced the number of person-years to make better use of our manpower. We have been getting objections from the union because it cuts down on overtime and changes lunch shifts. This is a typical labor-management dispute over work scheduling. I am afraid it is also typical in that, all too often, the safety issue is raised and that is alarming to the general public."

Regardless of which viewpoint is correct, I have to agree with Transport Canada in that safety is not being unduly compromised. When one realizes that there are about 3,000 messages daily, and in one month there are only 2 serious errors, then the percentage of error is extremely low.

The next article from J.D. is also from the Toronto Globe & Mail of June 28, 1986, and talks about a new type of radar called impulse radar. This new technology is being developed by Cambridge Consultants (CCL), a major British research organization, and will allow subterranean data to be gathered. This radar is finding applications for geological surveying for oil and mining companies and for mapping the paths of underground pipes and sewers.

Conventional radar equipment transmits a pulse through the air and any airborne solid object will reflect the radar signal. The time of return gives the range of the object, and the antenna pointing direction gives its bearing. Such systems use microwave frequencies, and the transmitters, receivers, antennas and waveguides (or cables) are specifically tuned to the operating frequency. This tuning makes it possible to obtain returns over hundreds of miles, giving surveillance of a large geographic area.

Impulse radar is quite different in that a crude, broadband pulse of radio energy is sent into the ground. Considerable penetration into the ground has been achieved, and returns are obtained at the interfaces between disimiliar materials. Much of the work at CCL is concerned with generating very short but high-powered bursts of energy and the associated problems of designing aerials that will propagate adequately and receive sufficient returns from the the ground. The advantages of tuned radar equipment is lost because of the broad spectrum of wavelengths being transmitted.

One of the versions of the new impulse radar is a helicopter-mounted system designed to measure sea ice thickness for the Arctic offshore industries. Data on ice thickness and the speed of motion of the ice and/or of the water currents underneath can be obtained.

In another application, the transmit/receive head is accomodated in a horizontal or angled bore hole and can "see" the surrounding strata. For example, this would give an indication of a termination or change in direction of a coal seam or other deposit.

For pipe detection, impulse radar has the advantage that it can detect plastic, whereas many systems based on magnetic field technology can only find metal.

J.D. also passed along a glossy brochure describing a vehicle theft alarm system that includes a pager worn by the driver. The system is distributed by Auto Page Inc of Torrance, CA and is model AP-4200. The pager operates on 26.995, 27.045, 27.095, 27.145, 27.195, or 27.255 MHz. One should note that these channels fall in between the standard CB channels. The pager is tone activated, and there are 30,000 possible different tone combinations. The car transmitter power is rated at 4 watts.

Thanks for the material, J.D. I hope we will hear more from you in the near future.

My next letter this month is from Harry (CANA-074). He passed along some articles and other information. A couple of the articles deal with 800 MHz cellular telephone systems. The first article came from the Radio Communications Report newsletter, and announces the turn up of the Cantel cellular system in Edmonton on Sept 9, 1986. Cantel estimates that it will invest more than $7 million in building and operating its Alberta network (Edmonton and Calgary). Since building systems in Montreal and Toronto in July 1985, the company has expanded its cellular service to include 15 markets in Quebec, Ontario, Alberta

and British Columbia. Cantel provides competition for the cellular service provided by the telephone companies in Canada.

While we are on the topic of Cantel systems in Alberta, I'd like to add my own contribution here. From the Canadian Communications Network Letter, January 12, 1987, it seems that Cantel is getting quite a rough ride in trying to set up cellular networks in the prairies. In a ruling on December 17, the Alberta Public Utilities Board (regulator for both Alberta Government Telephones (AGT) and Edmonton Telephones, and the deciding body on interconnection) forced Cantel to put all long-distance calling generated by its cellular customers onto AGT facilities. Cantel had planned to build its own long distance facilities, something permitted in BC, Ontario and Quebec under federal (CRTC) policy.

Cantel is also protesting the rates charged by AGT for interconnection, which Cantel claims are 10% to 30% higher than Bell Canada's. The problem is that the CRTC recognizes Cantel as a communications carrier, something the Alberta PUB has not done.

Although there continues to be trouble negotiating agreements with AGT, Cantel planned to start up the Calgary cellular system in January, 1987.

CellNet Canada, a collective of telephone companies providing cellular telephone service, announced that an 800 MHz system was started up in Calgary by AGT in December, 1986. CellNet also indicated that cellular service will be provided in Winnipeg by Manitoba Telephone System (MTS) sometime in early 1987.

Things look brighter for Cantel in Nova Scotia. The provincial regulator in that province was amenable to considering possible sharing of facilities in some areas by Cantel and CellNet member Maritime Telegraph & Telephone Co (MT&T). Corporate and marketing units will continue to be separate. Cantel expects to turn up a system in Halifax in August 87 at the earliest.

In that same newsletter was another short article announcing that Canadian General Electric's Mobile Radio Division has introduced its 422 MHz GE-MARC VE trunked radio service in Calgary and Edmonton in December, 1986. Like the 800 MHz trunked systems, the service enables users more privacy because the computer automatically selects one of five voice channels for use. The telephone access option is available in Edmonton, but not in Calgary. A spokesman said CGE was trying to gain radio interconnect with AGT, but so far has had no success. AGT provides local telephone service to Calgary, while Edmonton Telephones provides telephone service to Edmonton. CGE said that its MARC VE network will expand to Victoria and Quebec City in early 1987.

Getting back to Harry's contribution, he also passed along an article that appeared in the Edmonton Journal on criminals using cellular telephones. The article was carried on the Canadian Press wire service, and Bruce (CANA-019) also sent me a copy of the story that appeared in the Toronto Sun. I discussed the problem of criminals using cellular telephones in my March 87 column. These articles are an expansion of that discussion.

Organized crime in Canada conducts a lot of business over cellular telephones because police forces lack the technical capability to tap them, according to Inspector Russell Sontar, acting chief of Special Services for the RCMP in Ottawa. The equipment is available, but is far too expensive. "To buy a system costs about $100,000 and you would have to have one system for every target that you are tapping," he said. "We figure that there's got to be a cheaper way of doing it."

Police heavily rely on phone taps, particularly in drug investigations to build a conspiracy case and to learn when shipments are due, a Montreal RCMP agent said. Another agent said, "You've got all these crooks driving around town in their Mercedes with cellular phones in their ears arranging drug deals and (presently) we can't do anything about it."

Cellular telephones operate in the 800 MHz band, and can easily be monitored by a variety of scanners on the market. The problem is finding out on which of the 312 channels a target is using. (There are 312 voice channels for telephone companies, and 312 channels for the Cantel system. It is assumed that the police forces can find out which system he is subscribing to. The newspaper article indicated, for some strange reason, that there are only 99 channels to check, which can't

be correct. -ed)

Police are desperately searching for affordable computer software and hardware that will immediately identify the right channel. RCMP engineers are working on the problem while other Canadian police forces are "watching our lead in this situation. We're just on the edge of the technology," said Inspector Sontar.

Cellular telephones aren't the only technical problem for the Canadian police forces. Bell Canada plans to sell devices next year - call encrypters - which will scramble the telephone conversations. The method of scrambling is not known, but the newspaper article describes the "conversations being turned into jibberish for a third party listening in." Whatever the encryption method, it can't be too expensive or it won't sell. I wouldn't be surprised if it is a simple voice inversion type scrambler, for which descramblers are a dime a dozen.

Thanks for the articles go to Bruce and Harry. Bruce also sent in some more information, which I will include in a future column. For now, I'd like to continue with the material from Harry.

Another article that appeared in the Radio Communications Report of Jan 1, 1987 told of a pilot project being conducted in Montreal. Party goers in Montreal who have had a little bit too much to drink can now call special cellular phone equipped cars for a ride home. The project is called Safeway Chez-Vous, and is jointly by Bell Cellular and NovaTel Communications. Bell Cellular is providing the air time, and NovaTel is providing the phones. Corporate sponsors include Corby Distilleries, Meagher's Distilleries, Labatts, St. John Ambulance and Group Commerce Insurance.

Harry also sent in a correction to my January 87 column. The West Edmonton Mall Security 500 units are on 463.5875 / 468.5875in. Also from Harry:

| | | |
|---|---|---|
| Lethbridge Police Dept | Ch 1 | 413.2625 / 418.2625in |
| | 2 | 413.6375 / 418.6375in |
| | 3 | 413.0875 / 418.0875in |
| | 4 | 413.1625 / 418.1625in |
| Cliff's Towing - Edmonton | | 164.100 / 164.100 |
| Marmot Basin Ski Lifts - Jasper | Ch 1 | 163.560 / 164.640in |
| | 2 | 163.560 / 163.560 |
| Rabbit Hill Ski Resort | | 157.560 / 157.560 |
| Wild Rapids Waterslide - Sylvan Lake | | 162.705 / 162.705 |

Harry notes that Cliff's Towing has the Edmonton Police contract to tow cars, and that they are now using voice inversion scrambling. This is the only towing company that I know of that uses voice inversion scrambling, and one of only 3 agencies that I know of across Canada that use voice inversion. DVP seems to be the way to go for the police forces.

Harry also notes that the Rabbit Hill Ski Resort is located south of Edmonton, and Sylvan Lake is located west of Red Deer.

Harry sent along an updated list of detachment identifiers for the Nelson-Cranbrook RCMP subdivision.

| | | | |
|---|---|---|---|
| 1 | Midway | 13 | Nelson Subdivision |
| 2 | Grand Forks | 14 | Creston |
| 3 | Trail | 15 | Cranbrook |
| 4 | Rossland | 16 | Kimberley |
| 5 | Castlegar | 17 | Invermere |
| 6 | Fruitvale | 18 | Radium |
| 7 | Salmo | 19 | Fernie |
| 8 | Crescent Valley | 20 | Sparwood |
| 9 | New Denver | 21 | Golden |
| 10 | Nakusp | 22 | Field |
| 11 | Kaslo | 23 | Elkford |
| 12 | Nelson | | |

Thanks very much for all of your information, Harry. That's all I have room for this month. Until next month, best wishes to you all.

# LISTENERS' PROFILE

Joe M. Lewis, 750 Scotland St., Dunedin, FL 33528

**This column is for special projects that explain various systems in detail. Frequencies and radio codes of municipal agencies and certain federal government agencies may be listed, as well as those of large businesses and corporations. The contribution must be lengthy enough that publishing it in one of the regular columns would not be possible. If you would like to submit such a report, please follow No. 8 on the inside front cover of the Newsletter.**

U.S. GOVERNMENT VHF MARINE FREQUENCIES
ARKANSAS RIVER NAVIGATION SYSTEM
Compiled by Chris Elliott, OK-31 01 APR 87

notes:

USCG - U.S. Coast Guard
USACE - U.S. Army Corps of Engineers

FB - Base Station
FC - Coast Station
FX - Fixed Station
ML - Land Mobile Station
MS - Ship Station / Bridge - Bridge Station

xxR - 'R' suffix represents repeater
w - Power Output (Watts)

| FREQ.(MHz) | SERVICE | LOCATION | EMS DATA: | |
|---|---|---|---|---|
| 156.600 Ch.12 | *** Port Operations *** | | | |
| | USACE | Braden | WUI323 | FC-30w |
| | USACE | Cowlington | WUI324 | FC-30w |
| | USACE | Wagoner | WUI326 | FC-10w |
| | USACE | Inola | WUI327 | FC-10w |
| | USACE | Webers Falls | WUI355 | FC-10w |
| | USCG | Sallisaw | NML 12 | FC-25w MS-25w |
| | USCG | Poteau | NML 7 | FC-50w MS-25w |
| 156.650 Ch.13 | *** Navigation *** | | | |
| | USACE | Braden | WUI323 | FC-10w |
| | USACE | Cowlington | WUI324 | FC-10w |
| | USACE | Wagoner | WUI326 | FC-10w |
| | USACE | Inola | WUI327 | FC-10w |
| | USACE | Webers Falls | WUI355 | FC-10w |
| 156.700 Ch.14 | *** Port Operations *** | | | |
| | USACE | Braden | WUI323 | FC-30w |
| | USACE | Cowlington | WUI324 | FC-30w |
| | USACE | Wagoner | WUI326 | FC-10w |
| | USACE | Inola | WUI327 | FC-10w |
| | USACE | Webers Falls | WUI355 | FC-10w |
| | USCG | Sallisaw | NML 12 | FC-25w MS-25w |
| | USCG | Poteau | NML 7 | FC-50w MS-25w |
| 156.800 Ch.16 | *** Distress, Calling *** | | | |
| | USACE | Braden | WUI323 | FC-30w |
| | USACE | Cowlington | WUI324 | FC-30w |
| | USACE | Wagoner | WUI326 | FC-10w |
| | USACE | Inola | WUI327 | FC-10w |
| | USACE | Webers Falls | WUI355 | FC-10w |
| | USCG | Sallisaw | NML 12 | FC-25w MS-25w |
| | USCG | Poteau | NML 7 | FC-50w MS-25w |
| 157.050 Ch.21 | *** U.S. Gov't *** | | | |
| | USCG | Sallisaw | NML 12 | FC-25w MS-25w |
| | USCG | Poteau | NML 7 | FC-50w MS-25w |

157.100 Ch.22 *** USCG Liason ***

| | | | |
|---|---|---|---|
| USACE | Braden | WUI323 | FC-25w |
| USACE | Cowlington | WUI324 | FC-25w |
| USACE | Wagoner | WUI326 | FC-25w |
| USACE | Inola | WUI327 | FC-25w |
| USACE | Webers Falls | WUI355 | FC-25w |
| USCG | Sallisaw | NML 12 | FC-25w MS-25w |
| USCG | Poteau | NML 7 | FC-50w MS-25w |

157.125 Ch.82 *** U.S. Gov't ***

| | | | |
|---|---|---|---|
| USACE | Braden | WUI323 | FC-25w MS-25w |
| USACE | Cowlington | WUI324 | FC-25w MS-25w |
| USACE | Wagoner | WUI326 | FC-25w MS-25w |
| USACE | Inola | WUI327 | FC-25w MS-25w |
| USACE | Webers Falls | WUI355 | FC-25w MS-25w |

157.150 Ch.23 *** U.S. Gov't ***

| | | | |
|---|---|---|---|
| USCG | Sallisaw | NML 12 | FC-25w MS-25w |

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## U.S. ARMY CORPS of ENGINEERS
## TULSA DISTRICT / UNITS & CALLSIGNS

| FREQ.(MHz) | | EMS DATA: | |
|---|---|---|---|
| 38.910 | Tulsa | WUI3 | F3 FB 60w<br>F3 ML 30w |
| 163.4125 | Tulsa | WUI3 | F3 FB 110w<br>F3 ML 110w |
| 163.4375 | Tulsa | WUI3 | F3 FX 250w<br>F3 FB 250w<br>F3 ML 100w |
| 165.0375 | Tulsa | WUI3 | F3 FX 250w<br>F3 FB 250w<br>F3 ML 100w |

| WUI units | type platform | | | |
|---|---|---|---|---|
| 305 - Skiatook Lake | FB | ML | | |
| 306 - Candy Creek Lake | FB | ML | | |
| 307 - Copan Lake | FB | ML | FXR | FBR |
| 308 - Pine Creek Lake | FB | ML | | |
| 309 - Broken Bow | FB | ML | FXR | FBR |
| 310 - Canton Lake | FB | ML | FX | |
| 315 - Jet | FB | ML | FX | |
| 316 - Fort Gibson Lake | FB | ML | FXR | FBR |
| 317 - Fort Supply | FB | ML | FX | |
| 318 - Wister Lake | FB | ML | FXR | FBR |
| 320 - Oolagah Lake | FB | ML | FXR | FBR |
| 321 - Keystone Lake | FB | ML | FX | |
| 322 - Eufaula Lake | FB | ML | FXR | FBR |
| 323 - Braden | FB | ML | FXR | FBR |
| 324 - Kerr Dam | FB | ML | FXR | FBR |
| 326 - Wagoner | FB | ML | FXR | FBR |
| 327 - Inola | FB | ML | FXR | FBR |
| 328 - Heyburn Lake | FB | ML | FX | |
| 330 - Clayton Lake | FB | ML | FXR | FBR |
| 351 - Optima Lake | FB | ML | | |
| 352 - Birch Lake | FB | ML | | |
| 353 - Kaw Lake | FB | ML | FXR | FBR |
| 356 - Waurika Lake | FB | ML | | |
| 357 - Hugo | FB | ML | FXR | FBR |
| 34 - Durant | | | FXR | FBR |
| 35 - Broken Bow | FB | ML | | |
| 36 - Muskogee | FB | ML | | |
| 38 - Bartlesville | FB | ML | | |

- Tenkiller Lake.....FXR FBR
- Hulah Lake.....FXR FBR
- Big Cedar.....FXR FBR

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NORTHEAST OKLAHOMA VHF MARINE FREQUENCIES
CIVILIAN & LOCAL GOVERNMENT

| FREQ. (MHz) | | USER | |
|---|---|---|---|
| 156.80 | KFL352 | Mobilfone Service Inc..... | Tulsa, OK |
| 161.90 | KFL352 | Mobilfone Service Inc..... | Tulsa, OK |
| 156.45 | WHG605 | Port of Catoosa..... | Catoosa, OK |
| 156.55 | WHG605 | Port of Catoosa..... | Catoosa, OK |
| 156.60 | WHG605 | Port of Catoosa..... | Catoosa, OK |
| 156.80 | WHG605 | Port of Catoosa..... | Catoosa, OK |
| 156.35 | KVR438 | Pine Grove Marina..... | Sequoyah, OK |
| 156.45 | KVR438 | Pine Grove Marina..... | Sequoyah, OK |
| 156.70 | KVR438 | Pine Grove Marina..... | Sequoyah, OK |
| 156.80 | KVR438 | Pine Grove Marina..... | Sequoyah, OK |
| 156.45 | WDT531 | Baker..... | Cleveland, OK |
| 156.80 | WDT531 | Baker..... | Cleveland, OK |

SEE YOU ALL NEXT MONTH, I HOPE THE LISTENER'S PROFILES WILL START COMING IN, IF NOT, I WILL HAVE AN UPDATE ON PINELLAS COUNTY,FLA. FIRE STATIONS AND FREQUENCIES.

# contact info wanted

**This column has two purposes: to help members contact each other, and to help member obtain directly from one another information on various subjects related to 2-way communications monitoring. If you would like to meet, converse or correspond with, other members by telephone, letter, or cassette, this column is the place to state your interest. Remember—those who respond will do so directly, so be sure to provide your phone number, the best time to be called, and/or your address. Write to:**

**Scott Mattson, 2820 Bridge Ave, Point Pleasant, NJ 08742**

**Requests for copyrighted material or information considered 'sensitive' by RCMA will not be printed in this column.**

INFO WANTED: I would like the 10 codes used by the Guilford County Sherrif's Dept. and by Guilford County EMS. Will correspond and exchange info.
RANDY WHALEY (NC-067) 3636-B Lakefield Dr., Greensboro, NC 27406

INFO WANTED: I would like 10 codes and information on any state, city, county, or local government system nationwide. Any info would be greatly appreciated.
RANDY WHALEY (NC-067) 3636-B Lakefield Dr., Greensboro, NC 27406

CONTACT WANTED: I'm really new in scanner monitoring. I have a Regency MX-3000 and a Channel Master antenna. I would like info on frequencies, especially state and police in upstate New York and PA areas. Also ideas on equipment.
KENNETH D. FROST (NY-366) 265 Coddington Road, Ithaca, NY 14850

CONTACT WANTED: I would like to meet members of the club who live in New York City and who are interested in Marine Radio. I regularly go down to the piers (Manhattan) where ships like and including the "QE2" dock and listen to the ships/ tugs talk to each other. If you are a ham, you can call me on: 223.760 N2BXW/R or 445.775 WA2LYQ/R. My call is NK2U and my name is Roland.
ROLAND STINER (NY-365) 820 West End Ave., New York, NY 10025 (212) 749-2217

CONTACT WANTED: I would like ALL RCMA members who are Amateur Radio Operators to drop me a postcard or QSL card stating: your callsign, class of license, address, and type of equipment you own.
JOE VELASQUEZ (CA/SO-006) 248 Plantation Way, Vacaville, CA 95688

Lovely summertime is here. The time to cut the grass, paint the house and do all those other things that winter has postponed. Speaking of summer, I have just returned from a vacation that led me to the home of Grove Enterprises in Brasstown North Carolina. For those of you who aren't familiar with Grove Enterprises, they are a radio and scanner dealer. The owner Bob Grove is an accomplished amateur radio operator and publisher of Monitoring Times. It was enjoyable voyage to arrive their. They are located in the Smokey Mountains and the scenery is just beautiful. It was an enjoyable visit, although I did walk away without my dream receiver, the ICOM 7000. I did have to resist awful hard though!

## IN THE MAIL

The mail was a little slow this month, but a few letters were received. Seems that the MS-DOS users are 'coming out of the wood work'. Seems that more people are getting the DOS machines and are needing some radio software. I have a few pieces, but not that many. Like I have said before, most of the radio software seems to be for the 64. I am working on translating a couple of them, but with work, work around the house, etc. it makes it a very time consuming task. Hang in there with me and I will have something for you DOS people shortly.

**Ed Mertes MO-098** wrote with a few comments and ideas regarding RCMA and computers and related information.

One topic that Ed mentioned was the standard format for frequency listings. It seems that everyone has their own format for publishing and distributing frequency listings. I don't know if there is anyway to standardize listings since everyone manipulates their data a different way.

**Alan Henny MD-069** received the disks that he had sent to be converted from Commodore 64 Easy Script word processor format to MS-DOS ASCII files. Alan reports that the disks turned out just fine and that no information had to be retyped. Glad to be of assistance to you Alan, after all, computers are meant to save work and not create it (well, most of the time!).

Now onto this months topic.....

## BACKUP

If any of you are like me, you work on a program or spreadsheet for a long time and then just save it off to disk. The thought never occurs to you that after you have just spent two weeks working on something that it could be destroyed in less than a second. This is the reason for backups. I remember the first time that this happened to me. I had been writing a program and working on it for about three months. I finished working on the program and then went on to do something else. After about 3 hours, I found out that I needed to format a disk. I seen there was one in the drive which I thought was just a test or blank (it was actually the program that I had been working on for three months!). I proceeded to format the disk and about halfway through the format, I realized what I had done. I was stunned. Three months of hard work right down the tube with no backup copy. Kind of leaves an empty feeling right down in your stomach. Since then, if I spend more than 20 minutes on something I make a copy of it. It only takes a few seconds to back something up, and a heck of a lot longer to redo it.

From my experience, you can see the importance of backups. With different kinds of systems (computers) there are a couple different ways to accomplish this. If you are working with a dual drive system (either dual floppies or a hard disk and floppy) just copy the file that you are working with over to a different disk AND REMOVE IT FROM THE MACHINE and store it in a safe place. With a single drive system, there are various disk copy programs to duplicate diskettes. This method works just fine for a few files, but if you are working with a hard disk that can hold a lot of information, the file copy method is slow and bothersome.

With the cost of mass storage (hard disks) being so low, almost everyone is equipping their computers with hard disks. This eliminates the need to swap floppy disks in and out of the computer and have all your software and working files on floppy. Hard disk tend to make people lazy about backups. Since all your information is stored in a central location, one never quite realizes the amount of information that can be zapped in no time. Thus, you need to make backups of the entire disk from time to time depending on how much information you are putting on the drive. There are a few ways to do this. With the non MS-DOS based systems, some manufacturers provide software to accomplish this. With the MS-DOS machines, there is a utility to backup the entire disk. Although it is generally very slow, it does work. Various companies provide software to backup the mass storage hard disk in a matter of minutes with the elimination of extra time and steps that the DOS backup utility require. One I have worked with personally is called Fastback. It provides quick backup and packs over the 360K of information on a diskette. It also provides error correction in case something goes wrong in the backup.

This brings me to the next thought. If you do any amount of important development work, it is always a good idea to have a backup of your backup stored at a location that is away from your place of work. A safety deposit box is what I use. Since I write a good portion of programs at home and work and store my backups there, what would happen if a disaster struck and the place burned down. Well most people would be more concerned about the fire, but that is what insurance is for. If you make your living with a computer as I do, it pays to have a copy of important software in a place that is safe (such as a safety deposit box). Consider this 'software insurance'.

The main thing to remember is EXPECT THE WORST to happen at any given moment.

**LOW COST PERFORMANCE TIP**

For those of you with IBM's and compatibles, there is a low cost way to gain a bit more processing speed from your computer. If you have an XT or compatible, your central processing unit is more than likely the Intel 8088 chip. NEC (Nippon Electric Company) has developed a work alike chip that is about 15% faster and runs cooler to replace your 8088 with. The NEC V20 will add a small percentage of increased speed to your 4.77 mhz machine. If you own a 'Turbo' XT compatible, your CPU is probably the 8086-2. The turbo computers usually run at a rate of 4.77 mhz to 8.0 mhz. Replacement of the 8086-2 with the V20 makes a marked improvement in performance.

Depending on what machine (normal or turbo) decides which chip you should purchase. If your computer is a standard 4.77 mhz machine and not the turbo, the chip that you should get is the NEC V20-5 (5 for 5 mhz maximum rated speed) and if you own the turbo, the NEC V20-8 (8 mhz maximum rated speed) is the one for you. Either of these chips are available from any mail order or local computer dealer. Plan on spending about $15-25 for the chip.

Installation is for the most part painless. First, unplug your computer and make sure that no static electricity is present. Static can render your computer and it's disk drives useless in a matter of microseconds (BACKUP!). Then remove the screws that attach the cover of the computer to the chassis. On the XT, there are usually 4 of them. 2 located on the back of the computer at the corners. Don't remove the screws for the power supply, etc. Slide the cover off of the computer. The next step is to locate your 8088 or 8086-2 processor chip. This is usually the chip directly behind the keyboard plug in or directly to the left of the power supply (if you are standing in front of the machine). The numbers will usually be stenciled on the top of the chip. BEFORE you remove the chip, note its position in the socket. There will be a notch on one side of the chip. Remember which way the notch is facing so that you can install the replacement in the same direction. Removing the chip can be somewhat traumatic for first time 'chip pullers'. Radio Shack sells actual chip removers for (usually) less than a dollar or you can CAREFULLY use a small straight edge screwdriver. I personally never broke down and bought the actual chip puller (dunno why though???). Carefully insert one edge of the screwdriver between the bottom of the chip and the top of the socket. Insert it just a little and then pry up on the chip GENTLY. What you will do is raise one end of the chip a bit to slide the chip up to insert the screwdriver a bit more. Don't pry up on the chip all the way or you will bend the pins in the socket on the other side of the chip. Once you have gotten the chip about halfway out, push the screwdriver in a little further and apply reverse pressure to get the back half of the chip out enough so that you can reach in and remove it. Take the chip out.

Next, get your NEC replacement chip and align the notch the way the original 8088 or 8088-6 chip was. Line up the legs with the holes in the socket. This is not an easy task sometimes. If the legs are bent in any great amount, carefully (remember I said carefully) bend then back to match the others. If the legs are wider than the socket, gently apply pressure to align them with the socket holes while applying a slight downward pressure. Once all the legs of the NEC chip are slightly inserted into the socket, press down to seat the chip. Once the chip is inserted, double check that all the legs of the chip are inserted into the socket. If you happen to miss one, it will curl up and not go into the socket hole. If this happens, follow the removal procedure and straighten the leg back and re-insert the chip.

If all goes well, this should be all you need to do. Before you put the cover back on though, you might want to test it out to be sure that everything works. Plug back in the PC and power it up. Be sure not to drop anything on the PC board(s) in the computer or some kind of electrical magic will be performed if it shorts out. You can test the processing increase by using some type of CPU speed tester such as Peter Norton's SI (System Information). On my 4.77/8.00 mhz system, I went from a 1.0 at 4.77 (the standard) to a 1.8 and in turbo mode from a 1.7 to a whopping 3.1. This amounts to approximately 15-35% increase in overall CPU processing speed. Next, power down the PC and reinstall the cover.

You now have a PC which is a bit more efficient in calculations, etc than the standard 8088 chip. NEC has streamlined many of the operations that the 8088/86-2 chip got bogged down with. The chip is also about 99.999999999% compatible with the standard 8088. I have been running them since they first came out with no problems at all. If you are one of the fortunate ones to have an 80286 machine, I believe there is also the NEC V30 replacement chip, but I can't swear to it. It would probably bump up performance about as much as the V20.

**THOUGHTS**

It seems that very few people are interested in the BBS and I guess I really can't blame them. Everyone is concerned about money and the long distance charges aren't getting any cheaper despite what major telecommunications companies are telling us. I did notice a couple letters to Your Thoughts regarding bbs's and such. The member stated that a lot of people (including myself) belong to major time sharing systems such as CompuServe, etc and that electronic mail could be done there. But that isn't free either, but is cheaper (in some cases) than the cost of a long distance phone call. If some type of SIG (Special Interest Group) could be set up on one of them, this would prove beneficial to all. Not only would it give easier access without the ld charges, it would give greater exposure to RCMA. I don't think that this would come for free and some charges would be involved in 'renting' space on their system. I will do some checking to see exactly what is required and the cost that are involved.

I still need input into the column to find out what all of you want to see. I know the column has been a little dead in the past, but I am trying my best to spark a little interest in computers and digital communications. Have you written any programs relating to radio? No matter how simple or complex they are, why not share them with the others so that we all can enjoy our hobby even more. Hopefully before the summer is out, I can persuade my wife to let me get an ICOM 7000 so that I can start doing some development work with it.

I would like to hear from anyone who has interfaced a computer with the radio no matter what it does and no matter what computer it is hooked to. As this column is being written, I am trying to get my hands on a 64 so that I can start converting some programs to other computers. I am running into problems doing it now due to the fact I am not sure of the results that should be obtained from the 64 version. I need to parallel the output to make sure it is doing what it is supposed to.

**IN CLOSING**.....

On a local police frequency, the report was given of a car traveling the wrong way on a one way street. The license plate was called in and it came back to a guy named..... **Bronson, Charles**. A slight pause and then someone made the comment of "*Boy, the guy must have a Death Wish*" (who said police business is all serious....)

# FCC TOPICS

**FCC news and information of interest relating to 2-way communications. Send comments and questions to:**

**George DuBois, 10048 NE Campaign, Portland, OR 97220**

The Commission has amended its rules to allow direct access from the public telephone network to paging systems operating on land mobile frequencies. This has been prohibited in the past, mainly because of concern about transmitter control (since anyone can dial up the transmitter). It was allowed in the 929 - 930 mHz Private Land Mobile paging band when it was allocated a few years ago, though, and numerous waivers have also been granted for dial-up paging in other bands (mainly EMS systems). In the absence of significant problems, the FCC will now allow such systems on all land mobile frequencies. As with autopatch use, cost of telephone service provided on shared repeaters must be born equally, on a non-profit, cost-sharing basis, among all users.

The FCC has terminated the proposal that would have created a new Consumer Radio Service at 462 mHz. This was to have been in the two 200 kHz-wide bands presently allocated to the General Mobile Radio Service (462.5375-462.7375 / 467.5375-467.7375 mHz). It would have been a low power, short range two-way service, probably without repeaters. It was to have been an inexpensive alternative to the GMRS, which uses regular commercial two-way radio equipment. A few favorable comments were received from individuals and user groups but none from any equipment manufacturers. There was considerable opposition from GMRS licensees and user groups, since the new service would have used

alternative emission types and narrowband channelling and probably would have required relocation of most, or all, existing GMRS licensees. Therefore, the Commission is wisely dumping the idea.

The FCC has modified Part 22 to allow interested parties to apply for Cellular Radiotelephone licenses for certain outlying, suburban areas. Present rules permit the licensee of a cellular system to serve his Cellular Geographic Service Area (CGSA) and to later modify his license to expand beyond this area to include the entire Census Bureau Metropolitan Statistical Area (MSA). No other party was allowed to apply for these unserved "fill-in" areas until the entire nationwide licensing period was over. It was felt that this was important to maintain an orderly licensing process. Otherwise, in effect, the Commission would have to reopen every market in the country for thousands of these fill-in applications. It was also likely that the existing licensee would expand his service area if these was sufficient demand for service. Some commenters in this proceeding argued that this policy prevented smaller telephone companies from applying for these areas and also that it denied service until the licensee realized the need, or felt the desire, to expand into the area. This amendment will provide for the acceptance of applications for these outlying areas five years after the grant of the construction permit for the first system in a market, regardless of whether this was a wireline or non-wireline system. The selection process will be determined at a later date.

The Commission has released a proposal that would allow the provision of Aeronautical Satellite service via the INMARSAT maritime satellites. INMARSAT (the International Maritime Satellite Organization) is an international group established to improve worldwide maritime communications. They currently provide service to ship and coast stations via three leased satellites serving the Atlantic, Pacific and Indian oceans. Comsat is the operating entity that provides this service to U.S. concerns and is designated as the sole operator of the U.S. share in INMARSAT. They are also responsible for any financial obligation such participation incurs. Since Comsat provides this service under Congressional authority, the FCC doesn't have the authority to permit similar, monopoly service in the Aeronautical-Satellite service. A number of companies have expressed interest in providing aeronautical satellite service, including ARINC. (Service is also proposed via satellites in other services.) So, the Commission is proposing that U.S. companies be allowed to form a consortium to contract with INMARSAT as the single U.S. representative. INMARSAT intends to launch its own, second generation satellites, the first by 1989. Each will have 3 mHz of spectrum in the 1.5 gHz Aeronautical-Satellite band, in addition to the adjacent, Maritime-Satellite band.

# FEDERAL GOVERNMENT and MILITARY

**Send all Federal Government and Military frequencies (including those of military aircraft), radio system details, and related questions to:**

**Dennis Biagioli, 607 W. Pleasant Ave, Villa Park, IL 60181**

**Sensitive frequencies will not be published. Coast Guard material must go to the VHF Marine Editor.**

## EDITOR TELLS ALL!

Hi! As you read this I'm traveling around the country playing drum and bugle corps. But, since I'm always urging you to contribute to this column, I thought it was time Illinois got some extensive coverage. So here is my personal list of frequencies under 200 MHz.

ILLINOIS FREQUENCY LIST

| LOCATION | AGENCY | FREQ | REMARKS |
|---|---|---|---|
| ALLENVILLE | AR | 169.5000 | |
| ALTON | AR | 164.2000 | LOCK & DAM #26 (WUG526) |
| | | 163.5375 | (WUG526) |
| | | 164.1750 | LOCK & DAM #26 (WUG526) |
| | | 163.4125 | LOCK & DAM #26 (WUG526) |

| | | | |
|---|---|---|---|
| ARGONNE | DOE | 164./500 | F4 (IN = 164.3750) |
| | | 154.2500 | |
| | | 154.2650 | "NIFERN" FREQ. |
| | N | 148.9750 | |
| | | 148.3750 | MARS R (IN=148.9750) |
| | | 148.4100 | (NOT IN 'FICHE) |
| | | 150.0900 | POSSIBLY ABANDONED |
| BALD KNOB | A | 168.7750 | |
| | | 164.8250 | |
| BANDON | AR | 163.4375 | |
| BATAVIA | DOE | 164.2500 | EXPERIMENTAL AREAS / KAB-304 |
| | | 162.0500 | VEHICLE MAINTENANCE |
| | | 169.6000 | TAXI'S |
| | | 167.8500 | PAGING |
| | | 167.9250 | SECURITY "CENTRAL LAB"/SCRAMBLE |
| | | 168.4500 | ROADS & GROUNDS |
| | | 164.2750 | EXPERIMENTAL AREAS |
| | | 164.3000 | |
| | | 164.3250 | "BUBBLE CHAMBER" UNITS |
| | | 164.3500 | PLANT MAINTENANCE |
| | | 154.0700 | |
| BATCHTOWN | AR | 163.5375 | |
| | | 038.8900 | C.O.E. |
| | | 038.6900 | |
| | I | 171.7500 | REPEATER (KOC636) |
| BEECHER CITY | AR | 169.4500 | |
| BENTON | AF | 038.9100 | |
| | AR | 139.1500 | |
| | | 038.6900 | |
| | | 038.8900 | C.O.E. |
| BETHANY | AR | 169.5000 | |
| BLOOMINGTON | FAA | 172.1750 | |
| BRANDON | AR | 164.2000 | |
| BROOKPORT | AR | 163.4375 | WUE-570 |
| | | 163.4125 | (IN = 165.0125) |
| BRUSSELS | I | 172.4500 | (KOC697) |
| | | 171.7500 | (KOC697) |
| CAIRO | AR | 038.8900 | C.O.E. |
| | | 038.9100 | C.O.E. (WUG211) |
| CALUMET HARBOR | AF | 165.3375 | DATA |
| CARLYLE | AR | 169.4500 | NON-VOICE |
| | | 139.1500 | |
| CARLYLE DAM | AR | 038.9100 | |
| | | 038.6900 | |
| | | 038.8900 | |
| CARLYLE LAKE | AR | 163.5375 | (WUG54) |
| CARTERVILLE | I | 039.5000 | |
| | | 034.8400 | |
| CHAMPAIGN | FAA | 172.1750 | |
| CHANUTE | AF | 138.3250 | |
| | | 139.7250 | MEDICAL NET (HOSP/AMBUL) |
| | | 148.1000 | MEDICAL PAGING |
| | | 139.8250 | FIRE/CRASH NET |
| | | 140.0000 | CIVIL ENG. (SNOW, ST & GND MNT) |
| | | 172.8250 | DISAST. PREP. & BASE EXERCISES |
| | | 173.5375 | |
| | | 165.1375 | TRAINING EQUIPMENT MAINTENANCE |
| | | 165.0375 | BASE TAXI NET |
| | | 163.5875 | REPORTEDLY E.O.D. |
| | | 163.4875 | COMMO. SQDN. OPERATIONS NET |
| | | 150.2250 | COMMANDER'S NET (M/PW 149.175) |

ILLINOIS FREQUENCY LIST

| LOCATION | AGENCY | FREQ | REMARKS |
|---|---|---|---|
| | | 143.4600 | |
| | | 149.1750 | COMMANDER'S NET (R/PW 150.225) |
| | | 138.4250 | SECURITY POLICE SPEC. OPS.(F-2) |
| | | 139.6500 | |
| | | 142.1550 | |
| | | 138.0750 | |
| | | 138.1650 | |
| | | 138.1750 | |
| | | 138.2750 | SECURITY POLICE DISP. (F-1) |
| CHESTER | AR | 164.2000 | |
| | | 163.4125 | (IN = 165.0125) |
| CHESTERVILLE | AR | 169.5000 | |
| CHICAGO | AF | 148.1500 | CIVIL AIR PATROL (IN=143.900) |
| | | 040.1700 | |
| | | 040.1900 | |
| | CG | 166.0750 | (100-W FBR) |
| | DOE | 164.3750 | |
| | FAA | 172.9500 | (FB/ML) |
| | | 172.9250 | (FB/ML) |
| | | 172.9000 | (FB/ML) |
| | | 172.1750 | (FB/ML) |
| | | 169.3500 | (FBR/ML) |
| | | 165.6125 | (FB/ML) |
| | | 165.7125 | MAINT USES |
| | | 165.7375 | ARPT MAINT F-2 |
| | | 166.1750 | ARPT MAINT F-1 |
| | | 169.2250 | (NOT IN 'FICHE) |
| | HHS | 171.2375 | |
| | N | 040.1000 | |
| | | 030.4500 | |
| | | 032.8500 | |
| | | 038.6500 | |
| | USPS | 166.2250 | KFA-908 |
| | | 170.1250 | |
| | | 164.9625 | |
| | | 164.9875 | UNIDENTIFIED USAGE |
| | | 162.2250 | KLM 472 R-OUT |
| | | 163.3750 | |
| | VA | 168.5250 | |
| | | 166.2000 | KAI-224 (FBR) |
| | | 171.3875 | |
| | | 168.0000 | KAI-224 |
| | | 164.7000 | SECURITY R (KLB-813) |
| | | 164.1750 | PAGING (KLB813) |
| CHICAGO DISTRICT | AR | 164.2000 | |
| CHICAGO HARBOR | CG | 165.3375 | DATA |
| CHICAGO MEIGS | FAA | 121.3000 | TOWER |
| CHICAGO O'HARE | AF | 173.5625 | "ALPHA" CONTROL & UNITS |
| | | 173.5875 | "CONTROL" TO D-UNITS; BASE MAINTENANCE?? |
| | | 138.3000 | 126TH AREFW LIFE SUPPORT F-1 |
| | | 138.4000 | 126TH AREFW LIFE SUPPORT F-2 |
| | | 173.4375 | "VOTER COMMAND" F-1 |
| | | 173.5125 | UNIDENTIFIED USAGE |
| | | 165.1125 | |
| | | 165.1375 | ANG AIRCRAFT MAINT. ("VICTOR CTL") /"VOTER COMMAND" F-2 |
| | | 165.0125 | MAINTENANCE FREQ. |
| | | 164.5000 | |
| | | 163.5875 | ANG FIRE & CRASH CREWS |
| | | 163.4875 | D.O.D. BASE POLICE |

ILLINOIS FREQUENCY LIST

| LOCATION | AGENCY | FREQ | REMARKS |
|---|---|---|---|
| | | 163.0000 | A.F. SECURITY POLICE |
| | | 143.8000 | PHONE PATCH |
| | | 149.1500 | (BASE) MAINTENANCE CONTROL |
| | | 149.2650 | USED, UNIDENTIFIED |
| | | 138.0750 | |
| | | 138.1650 | |
| | | 138.1750 | |
| | FAA | 162.3000 | L.L. WIND SHEAR ALERT SYS REMS. |
| | | 169.2500 | WIND TELEMETRY MSTR (PW 162.30) |
| | | 172.1750 | RUNWAY LIGHT CONTROL TONES |
| | | 172.9750 | R-W LIGHTS, B/M/R |
| COPPERAS | AR | 038.6900 | |
| DANVILLE | N | 041.9000 | |
| | | 036.8500 | |
| | VA | 166.2000 | |
| | | 168.0000 | |
| | | 168.5250 | |
| | | 164.5000 | |
| DECATUR | FAA | 172.1750 | |
| DIVERNON | DOE | 167.8750 | |
| DOWNEY | VA | 169.2000 | |
| | | 166.2000 | R-OUT (KAI-224) |
| | | 030.3700 | |
| DRESDEN | AR | 164.2000 | |
| | | 163.4375 | |
| EAST MOLINE | AF | 143.4600 | |
| | | 142.1550 | |
| EAST ST. LOUIS | AR | 164.2000 | LOCK & DAM #27 |
| | | 163.5375 | (WUG527) F-3/4 (IN=164.200) |
| | | 164.1750 | DAM & LOCK #27 (WUG527) |
| | | 163.4125 | DAM & LOCK #27 (WUG527) |
| | FAA | 172.1750 | NON-VOICE |
| ELCO | I | 166.4187 | |
| ELIZABETHTOWN | A | 168.1750 | KSB-821 |
| | | 170.5000 | |
| | | 164.1250 | |
| ELLIS GROVE | AR | 038.8900 | C.O.E. |
| | | 038.9100 | |
| | | 038.6900 | |
| FARMDALE | AR | 038.6900 | |
| FOREST PARK | USPS | 172.3000 | KPS-247 |
| | | 171.6250 | KPS-247 (FB/ML) |
| FOX LAKE | CG | 143.2800 | REPORTED 3/83 P/W 142.0800 |
| | | 142.0800 | |
| FT. SHERIDAN | AR | 165.4125 | (5-W ML'S) |
| | | 163.4625 | (5-W ML'S) |
| | | 141.2000 | |
| | | 173.4875 | |
| | | 165.6125 | |
| | | 165.0375 | |
| | | 165.0875 | REPORTEDLY ARMY COMMUNICATIONS COMMAND FREQ. |
| | | 165.1625 | |
| | | 163.5625 | |
| | | 154.2650 | "NIFERN" FREQ. |

ILLINOIS FREQUENCY LIST

| LOCATION | AGENCY | FREQ | REMARKS |
|---|---|---|---|
| | | 141.3250 | |
| | | 142.3250 | |
| FULTON | AR | 165.0125 | (OUT = 163.4125) |
| | | 163.4125 | (IN = 165.0125) |
| GALESBURG | FAA | 172.1750 | |
| GLADSTONE | AR | 165.0125 | (OUT = 163.4125) |
| | | 163.4125 | (IN = 165.0125) |
| GLENVIEW | N | 154.2650 | "NIFERN" FREQ. |
| | | 142.8500 | |
| | | 138.6000 | |
| | | 139.5500 | OPENHOUSE FOOD SERVICE MOVEMENT |
| | | 140.0250 | REPORTEDLY "BLUE BASE" |
| | | 140.0750 | REPORTEDLY OPERATIONS FREQ. |
| | | 140.1000 | "RAMP CONTROL" AND OPENHOUSE-CP |
| | | 140.6500 | |
| | | 140.7750 | |
| | | 140.9000 | |
| | | 032.4500 | |
| | | 032.6500 | |
| | | 034.1500 | |
| | | 034.3500 | |
| | | 034.5500 | |
| | | 036.5500 | |
| | | 036.8500 | |
| GLENVIEW NAS | N | 126.2000 | TOWER |
| GOLCONDA | A | 164.8250 | |
| | | 164.1250 | |
| | AR | 163.0250 | |
| | | 163.4125 | (IN = 165.0125) |
| GR CHAIN | AR | 163.4125 | (IN = 165.0125) |
| GRANITE CITY | AR | 173.8375 | |
| | | 173.4125 | |
| | | 165.0875 | ARMY DEPOT (AAF250) |
| | | 165.6125 | MOBILES |
| | | 163.5375 | |
| | | 164.1750 | LAND REPAIR UNIT (WUG530) |
| | | 038.8900 | C.O.E. |
| | | 038.9100 | |
| | | 038.6900 | |
| GREAT LAKES | C | 172.0250 | KF-7565 (FC/MS) |
| | | 171.0250 | (F-2 EMISS./5W-FXH STATION) |
| | N | 140.7000 | |
| | | 148.2750 | FIRE OUT/SIMP (IN=150.0750) |
| | | 150.0750 | (OUT = 148.2750) |
| | | 148.2900 | REPORTEDLY FIRE FREQ. |
| | | 148.3500 | D.O.D. SEC. F-2 (SIMPLEX) |
| | | 148.9500 | (OUT=149.4500) |
| | | 149.0100 | |
| | | 149.3700 | UNIDENTIFIED USAGE |
| | | 149.4500 | D.O.D. SEC F-1 (IN=148.9500) |
| | | 150.1000 | MED. PAGING & AMBUL. DISP. |
| | | 138.9500 | |
| | | 140.0750 | |

That's all there's room for this month, the list will be continued in the next issue. Until then...

73-

# INTERNATIONAL

**This column is for reporting 2-way communications frequencies above 30 MHz, radio system details, monitoring experiences, and any other information relating to monitoring in countries other than the United States and Canada. Send to:**

**Rickey Stein, 456 Barrymore Place, North Brunswick, NJ 08902**

## BAHAMAS REDUX-1987
### Part Two

Let's continue our tour of Freeport, Grand Bahama Island. Well, here I was with a list of 14 frequencies culled from a Pro-2001 which was sitting on the counter of the local Radio Shack agency in downtown Freeport. The frequencies were:

| | | | | | |
|---|---|---|---|---|---|
| 148.395 | 151.200 | 152.200 | 153.555 | 158.745 | 163.850 |
| 164.700 | 165.580 | 166.150 | 166.200 | 166.385 | 166.400 |
| 172.450 | 173.200 | | | | |

Looking at each of these in turn we have:

148.395 I frequently heard tones like a telephone system here. No voice, no other data.

151.200 No activity heard here.

152.000 Police frequency, as previously reported.

153.555 The only activity heard here was an AM aero signal which didn't belong here. No other activity.

158.745 A business frequency with a fair amount of activity. I was not able to ID anyone however.

163.850 Base side of duplex system- possibly a taxi service (#3 on the Island)-Austin and Sons Taxi Service. Mobile frequency is 164.700. 'Ocean'-base and mobiles.

164.700 Mobile side of 163.850-taxi base BUT also mobile to 160.200-the base frequency for Grand Bahama Taxi Union. What confusion to anyone just listening to the mobile transmissions.

165.580 No activity heard.

166.150 This is an active busines frequency with both American and Bahamian accents. Some type of trash and/or sanitation service-possibly Sanitation Services Ltd. Mobiles calls were 'P-'

166.200 Only some slight activity was heard.

166.385 Slight activity here. Previously reported as 166.390. 'Delta' units, talked about water pressure-Water Co?

166.400 No activity heard.

172.450 This was a medical page-tone and voice. #15 was a Dr. Johnson.

173.200 No activity heard here. Actually the radio at Radio Shack was locked up on this frequency when I turned the unit on. I eventually locked-out this channel before I left the store so that the radio would scan. Either a birdy in the radio or possibly an open/noisy channel.

There was one additional channel that I discounted- 162.500. This was probably supposed to be 162.550, NOAA weather (Florida) which could easily be heard on the Island with an outside antenna.

We were in the Bahamas during the last week of April. The Island had been suffering through a very dry spell- more than two months since the last heavy rain. Large patches of the Island were in flames both day and night but only on few occasions did we hear or see a fire engine. These were not just small brush fires, but were indeed conflagrations which involved many blocks of treed lots. Smoke covered the morning sky and school sessions were called off for several days. During the evening, the flames lit up the sky and on one taxi ride from our hotel to another on the beach, we travelled along a highway with flames on either side of the road. It appeared that the only time an attempt was made to fight the fire was when the flames approached a house or some other building. We asked why and the reply, more than once, was that drugs were being hidden in the wooded areas and the officials had decided to let everything burn.

The occasional fire engine was never close enough to spot an antenna and in fact, I'm not sure we ever heard any fire transmissions. There were some communications on the one police frequency which might have been associated with the fire, but these seemed to be from police and not fire units. These last units were identified as 'F' with a number.

Police activity was quite formal and the same as we have reported in several earlier reports. Units were called 'Delta', 'Sierra', and 'Yankee' with a number. The most curious fact about the transmissions was that one vehicle would ask permission from 'Police Control' to talk to another. This permission was always granted- at least while I was listening.

I was only able to locate the frequencies for two of the hotels during the time that we were there. It would seem that most of the security forces' radios were low power units. The distances between where we stayed and several of the other hotels were less than 5 air miles, but I could not find any other hotel security units from our room. The only other hotel which I located from their beach, was about 1 1/2 miles from us and still could not be heard from the room.

The Castaways Hotel used a CB radio system for all communications. These were the only CB units which were in evidence around the city. The units were all Radio Shack CB's and were fitted with extra long rubber duckies. They used channel 23 (27.255 MHz-AM) and could be monitored using a Sony ICF-7600D. Two other frequencies gave an 'open channel' on the Sony- 27.470 and 27.820. The Castaways was the one place where the guard allowed me to actually hold and examine his radio.

The only other friendly guard was the beach man at the Xanadu Beach Hotel. He willingly obliged by holding down his transmit button for me. The great frustration in trying to locate this frequency was to sit on the beach and hear the transmissions coming over his radio with out being able to pin down the actual frequency on my Pro-30. The problem was that this system was using a marine frequency and those were the only frequencies which I failed to scan through. It wasn't until I realized that I had missed a block from 156 thru 158, that I searched there and finally found them. He was on 156.925 (MC78- a non-commercial private marine frequency).

Here is a list of the frequencies on which some activity was noted: [bases indicated as ' ']

| | | | |
|---|---|---|---|
| 30.735 | open channel | 40.070 | open channel |
| 32.000 | open channel | 40.855 | noisy channel |
| 35.200 | open channel | 40.980 | noisy channel |
| 36.830 | noisy channel | 41.600 | noisy channel |
| 38.400 | open channel | 44.800 | open channel |

| | |
|---|---|
| 151.085 | 2-tone and voice pager, a hotel, American accents with some type of phone system connection. Heard in the area of the Xanadu Beach Hotel and Marina |
| 151.300 | weak signal |
| 152.100 | unknown activity |
| 152.550 | open channel |
| 153.675 | open channel |
| 154.425 | unknown activity |
| 154.515 | unknown activity 'Charlie' units |
| 155.625 | Electric company, RP, 'Meter Room' |
| 156.375 | unknown activity heard at harbor |
| 156.430 | unknown activity |
| 156.425 | marine activity |
| 156.450 | Xanadu Marina Ops |
| 156.925 | Xanadu Beach Hotel Security and Ops, 'Security Gate' |
| 157.100 | marine activity |
| 161.400 | open/noisy channel |
| 161.825 | marine operations (heard at harbor) |
| 161.825 | phone link, RP, voice and tone pager |
| 162.000 | unknown activity (heard at harbor) |
| 162.050 | unknown activity (heard at harbor) |
| 162.150 | unknown activity (heard at harbor) |
| 163.500 | unknown activity (heard at harbor) |
| 163.650 | IB-asphalt loading |
| 164.950 | open channel (heard at Xanadu) |
| 165.075 | activity heard all in Italian |
| 165.400 | voice pager |
| 165.800 | unknown activity |
| 166.185 | open channel |
| 167.500 | unknown activity-sounded somewhat like taxi |
| 168.150 | IB, RP, weak signal, construction units |
| 171.010 | unknown voice activity |
| 171.015 | open channel (at Castaways) |
| 411.500 | TV Audio harmonics |
| 416.9375 | open channel |
| 456.050 | noisy channel |

This is basically what I was able to hear. I will stop here and will conclude next month perhaps with some closing thoughts and with a comlete list of all frequencies logged for the Bahamas, both at Freeport and at Nassau. Until next month, .... שלום ר"ת

# MARKETPLACE

**Members may advertise, free of charge, items wanted, items for sale, and items for trade that are associated with the hobby of monitor/utility radio listening. No dealer ads will be accepted for this column. RCMA assumes no responsibility for the outcome of any transactions between members resulting from ads printed in this column. Send to:**

**RCMA MARKETPLACE, c/o Gary Darcy, P.O. Box 1329, Palmdale, CA 93550**

**All Marketplace ads will be accepted ONLY on special forms available from this column's editor. Send a self-addressed STAMPED envelope (business size) to the address above for a supply of forms. Foreign members do not need to include postage on envelopes. ALL MEMBERS must include their membership numbers.**

**The Marketplace editor can be contacted by electronic mail via the following services:**

| | |
|---|---|
| COMPUSERVE.....76566,1542 | GENIE.....GMDARCY |
| THE SOURCE.....BDW292 | MCI MAIL.....286-1087 |
| DELPHI.....GMDARCY | TELEX.....6502861087 |
| PEOPLE/LINK....GMDARCY | |

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EDITOR'S COMMENT: Members sending me self addressed stamped envelopes will receive approximately four Marketplace AD request forms for each twenty-two cents of postage included on their envelopes. Members in foreign countries need not include postage. I will cover that cost myself. Also, RCMA members who subscribe to any of the above listed computer data services may send their ad requests by E-MAIL to me using the I.D./addresses indicated above. Please be sure that all the information asked for on the ad request form is contained in your message to me. Thanks!

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EDITOR'S COMMENT: At present I have a transfer request pending with my employer to Salt Lake City, UT. My wife has already started work there. Hopefully, by the time you read this I'll be there with her. In the mean time, please continue to use the Palmdale, CA address. For faster service use E-MAIL, if possible. THANKS!!!

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FOR SALE: 8 items.

| | | |
|---|---|---|
| 1. | Bearcat 210XL. Like new, 18 channel. | $ 170.00 |
| 2. | Regency 1000HX. 30 channel hand/held | $ 140.00 |
| 3. | Regency 16ACT-T16K. 16 channel L/H/U. | $ 95.00 |
| 4. | Bearcat 250. 10.85 IF; 50 channel. | $ 170.00 |
| 5. | Regency 5000MX. 20 channel; 25/550 Mhz. | $ 270.00 |
| 6. | Regency 7000MX. 20 channel; 25/1300 Mhz. | $ 330.00 |
| 7. | Regency D810. 50 channel; L/Air/H/U. | $ 145.00 |
| 8. | Radio Shack DX-400 SW receiver w/broken handle. | $ 120.00 |

Contact: BRUCE GUSTAFSON (IL-147), 10294 Atwood Rd., Roscoe, IL 61073. (05/18/87)

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FOR SALE: 2 items.

| | | |
|---|---|---|
| 1. | Bearcat 210XL. | $ 110.00 |
| 2. | Bearcat BC-220. | $ 130.00 |

Both items include owners manual, automobile bracket & connector, and are in original boxes. Contact: RONALD ROTH (IA-049), 1132 - 24th St., West Des Moines, IA 50265 or telephone 515-225-6056. (05/26/87)

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WANTED: Regency HX-1000 or HX-1200. Unit must be in good condition. Contact: ROLAND STINER (NY-365), 820 West End Ave., New York, NY 10025-5357 or telephone 212-749-2217. (05/05/87)

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FOR SALE: MFJ/Grove Enterprises Scanner Filter 2010. Eliminates aircraft coming over your police frequencies or high band intermod. $30.00. Contact: JEFF HOOPER (GA-027), P.O. Box 803, Blairsville, GA 30512 or telephone 404-745-3908. (04/26/87)

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WANTED: Regency aircraft crystals (ACT-R92AP). Send list of what you have. Can use 119.0, 119.8, 121.5, 124.2, 129.85. Also could use service manual or photocopies. Contact: GEORGE DU BOIS (OR-001), 10048 N.E. Campaign St., Portland, OR 97220. (05/11/87)

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FOR SALE OR TRADE: CEI R-1401 VLF Receiver. 100 Khz - 600 Khz; digital display; excellent condition. $450.00. Contact: MICHAEL P. MURPHY (CA-SD-033), 11621 Valle Vista Rd., Lakeside, CA 92040 or telephone 619-561-2726. (06/04/87)

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# NEWS MEDIA COMMUNICATIONS

**This column is for reporting frequency and radio systems information of news media. Send related reports and questions on newspaper, radio, television, magazine, film production companies, etc. to:**

Allen G. Henney, MD-069, 6912 Prince Georges Ave, Takoma Park, MD 20912

FIRST THIS MONTH, A LOOK INTO THE ENTERTAINMENT & SPORTS PROGRAMMING NETWORK (ESPN). L. FREDRICK (CO-Ø55) OF ASPEN COLORADO WROTE TO LET US KNOW ABOUT BOB BEATTIE WHO COVERED THE RECENT WORLD CUP DOWNHILL EVENT WHICH TOOK PLACE IN ASPEN. THE ANNOUNCER COULD BE HEARD ON 467.875 & 487.875 DOING "CLIPS" FOR THE UPCOMING PROGRAMS. ITS ALWAYS NICE TO GET CONFIRMATIONS LIKE THAT! AFTER I RECEIVED THE LETTER FROM L. FREDRICK (CO-Ø55) I CHECKED FCC MICROFICHE & FOUND THE FOLLOWING LISTED TO "ESPN INC": 462.55, 462.575, 462.625, 462.65 (ALL 4 LISTED AS U.S. MOBILES KAC9723) & 464.925 (LISTED TO BRISTOL, CT KNBS3Ø6).

NEXT FROM ANOTHER MEDIA PROFESSIONAL, JOE VITTI (AZ-Ø3Ø) WHO NOW IS A STAFF PHOTOGRAPHER FOR THE L.A. TIMES. PRIOR TO WORKING FOR THE L.A. TIMES, JOE WORKED FOR THE ARIZONA DAILY STAR IN TUCSON. JOE SENDS US THE MEDIA FREQUENCIES FOR THE TUCSON NEWSMEDIA. JOE NOTES HOWEVER, THIS LIST COMES FROM 1984. BUT IT SHOULD BE A NICE STARTING PLACE FOR ANY INTERESTED MEDIA BUFFS.

TUCSON, ARIZONA NEWSMEDIA

ARIZONA DAILY STAR (PULITZER PUB) 452.975 (BASE)/457.975 (MOBILE)
TUCSON CITIZEN (GANNETT) 453.Ø (BASE)/458.Ø (MOBILE)
KVOA NBC (TV4) 45Ø.45 & 45Ø.15
KGUN ABC (TV9) 46Ø.2375 & 45Ø.65 (LIVE ENG)
KOLD CBS (TV13) 45Ø.35 & 45Ø.Ø1

THANKS JOE FOR YOUR TUCSON LISTINGS! NOW FROM THE DESK OF GEORGE WIGHT (CA-TO-ØØ1) WE HAVE THESE MEDIA UPDATES. KMKF RADIO (FM1Ø1.7) OF MANHATTAN, KANSAS USES 153.17 & 161.61. GEORGE SAYS, HE GOT THE KMKF INFORMATION WHEN HE WAS IN THE ARMY AT FORT RILEY, KANSAS. ALSO GEORGE SENDS 161.76 FOR WESTERN BROADCASTING (KEH45Ø) IN RENO. THANKS AGAIN GEORGE FOR ALL YOUR UPDATES!

NOW FROM CHRISTOPHER D. SMITH (CA-SJ-Ø1Ø) WE HAVE THIS UPDATE FOR STOCKTON, CALIFORNIA.

CALIFORNIA

AIRWATCH (SAN FRANCISCO) 45Ø.Ø5
KJOY JOSEPH GAMPLE STATION (AM128Ø) STOCKTON 161.64 (KEO514-6)
KOVR (TV13) STOCKTON (WQA994)
KWG (AM123Ø) STOCKTON 45Ø.7
PACIFIC, UNIVERSITY OF (STOCKTON) (KA44296) 45Ø.925
SACRAMENTO BASE 45Ø.1125, 45Ø.3875, 45Ø.4125, 45Ø.45 & 45Ø.65
SAN JOAQUIN DELTA COLLEGE STOCKTON (AM128Ø) 45Ø.85 (KR479Ø) & 166.25 (KLE451)
STOCKTON RECORD 173.275, 173.225 (BOTH KCW487) & 173.225 (NOT VERIFIED, BUT LISTED IN 1986 POLICE CALL)
HEARD IN STOCKTON (USER UNKNOWN) 45Ø.15 & 45Ø.1875
HEARD IN SAN FRANCISCO 45Ø.2125 (MAYBE KGO-AM)

AND FINALLY FROM CARL J. GEROSA III (NY-117), WE HAVE THIS LIST OF MEDIA FREQUENCIES FOR THE STATE OF MASSACHUSETTS. CARL HAS BEEN IN SCANNERS FOR 12 YEARS & IS A VOLUNTEER FIREFIGHTER IN THE TOWN OF MAMARONECK, NEW YORK. WE WILL HAVE MORE FROM CARL IN THE FOLLOWING MONTHS.

STONEHILL COLLEGE-NORTH EASTON MASSACHUSETTS
AIRBORNE TRAFFIC NETWORK (PROVIDENCE) 450.75 SYNDICATED TRAFFIC
FOR WALA, WBRU, WBSM, WHIM, WICE, WLKW, WMYS, WSAR & WSNE
ENTERPRISE PUB, "THE BROCKTON ENTERPRISE" (BROCKTON) 173.225
CIRCULATION/REPORTERS (KRK832)
GLOBE NEWSPAPERS (BOSTON) 453.0 (KCC223)
MIDDLESEX CO NEWS 173.225 FRAMINGHAM PAGING
PATRIOT LEDGER (PRESCOTT PUB) QUINCY 173.275
PROVIDENCE JOURNAL BULLETIN 173.275 PHOTOGRAPHERS/PAGING (KCA209)
WATD (FM95.9) MARSHFIELD COMMS 153.35 PHONE PATCHES (KKN683) &
170.15 INPUT TO 153.35 (KKN681)
WBZ (TV4) WESTINGHOUSE B/C (BOSTON) 450.05 F2 LIVE SHOTS (KZH872)
450.3875 ENG/NEWSBASE (KPE556) 450.55 F1 ENG/ASSIGN DSK (KCG839)
WHDH (AM850) BOSTON 455.3125 F2
F1 455.1125 (450.15 IN) ENG/REMOTES/NEWSROOM/SKYWAY HELO/CVS VANS
WICE (AM1290) 455.25 "SKYPATROL" TRAFFIC REPORTS & NEWS CENTER 12
WJAR (TV10) PROVIDENCE 450.2125 STUDIO A-ENG-TRANSPORTER (WYR238)
WLNE (TV6) PROVIDENCE/NEW BEDFORD 450.3125 ENG
WNEV (TV7) RKO, BOSTON 450.5125 F3 CUES 450.6125 F2 NEWS (KFZ940)
WPJB (FM105.1) PROVIDENCE JOURNAL BUL 450.7 "SPY IN SKY TRAFFIC"
WTEV (TV) PROVIDENCE/NEW BEDFORD 450.3125 MINI CAM CREWS (KGQ690)
WORCESTER TELEGRAM & GAZETTE 173.325 CIRCULATION (KCY405)

THANKS CARL! THOSE OF YOU THAT MONITOR IN THE WASHINGTON, D.C. AREA MIGHT LIKE TO TRY THE NEWSPAPERS. THE WASHINGTON POST PHOTO BASE, PAPER SERVICE & DISPATCH ALL OPERATE ON 852.5125 & 853.1125 (BOTH KNFZ205). THE WASHINGTON TIMES PHOTO BASE & REPORTERS CAN BE FOUND ON 854.0875 (KNDU359). I FIND BOTH THE POST & THE TIMES INTERESTING TO MONITOR, ESPECIALLY DURING A LARGE EVENT. THEIR PAPER REPORTERS SEEM NOT TO BE AS "SECRETIVE" AS THE TV OR RADIO REPORTERS. SEE YOU ALL NEXT MONTH...

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PAID ADVERTISING

# PUBLIC SAFETY

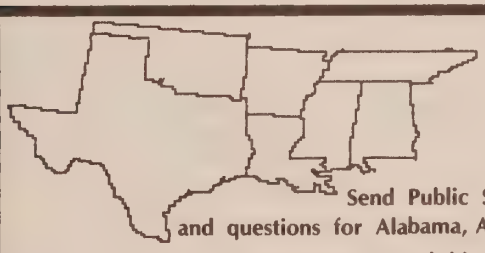
**This column is for reporting Public Safety and Special Emergency frequency information, radio system details, radio codes, dispatch areas, unit numbering systems, etc. for poilice, sheriff, fire, forestry (except USFS), fish and game, highway patrol, state police, prisons, prisoner work camps, local government, highway & street maintenance, port authority/bridge maintenance, animal control, ambulances, paramedics, hospitals, life guards, ski patrol, search & rescue, flood control, civil defense and disaster organizations. Input and questions for this column must be sent to the proper regional Public Safety editor listed below.**

**Associated Public-Safety Communications Officers, Inc.**

## OFFICIAL TEN SIGNAL LIST

APCO states the numbering, sequence, words or word phrasing of the below listed signals may no be altered, nor may the reserved signals be otherwise implemented except by APCO. Any user may employ signal numbers upward, beginning with 10-40, as needed for local dispatching. RCMA publishes this listing in support of APCO and their uniform dispatch code efforts. We will print other dispatch codes, different from the OFFICIAL APCO listing, only to assist our membership in their continued monitoring hobby. It is hoped you find this listing useful.

| | | | |
|---|---|---|---|
| 10-1 | Signal weak | 10-19 | (In) contact |
| 10-2 | Signal good | 10-20 | Location |
| 10-3 | Stop transmitting | 10-21 | Call ( ) by phone |
| 10-4 | Affirmative (OK) | 10-22 | Disregard |
| 10-5 | Relay (to) | 10-23 | Arrived at scene |
| 10-6 | Busy | 10-24 | Assignment completed |
| 10-7 | Out of service | 10-25 | Report to (Meet) |
| 10-8 | In service | 10-26 | Estimated time of arrival |
| 10-9 | Say again | 10-27 | License/Permit Information |
| 10-10 | Negative | 10-28 | Ownership Information |
| 10-11 | ( ) on duty | 10-29 | Records check |
| 10-12 | Stand by (stop) | 10-30 | Danger/Caution |
| 10-13 | Existing conditions | 10-31 | Pick up |
| 10-14 | Message/Information | 10-32 | ( ) units needed (Specify) |
| 10-15 | Message delivered | 10-33 | Help me quick |
| 10-16 | Reply to message | 10-34 | Time |
| 10-17 | Enroute | 10-35 through 10-39 are reserved for future assignment by APCO. User option 10-40 upward. | |
| 10-18 | Urgent | | |



## PUBLIC SAFETY - SOUTH CENTRAL

Send Public Safety and Special Emergency frequencies, radio system details, and questions for Alabama, Arkansas, Louisiana, Mississippi, Tennessee, Oklahoma, and Texas to

Ed Lentz, 609 Yorkshire, Pasadena, TX 77503-1450

GEnie - ELENTZ DELPHI - THISARSE COMPUSERVE - 72645,172

Welcome to Public Safety - South Central. Not much to write about this month due to there being only one contribution from a new member in Tennessee. Folks, if you don't send anything in I will not have anything to print. If you want an interesting column you have to give me something to write about. According to the most recent survey, 41% of you monitor more than 20 frequencies. What are they? I would like to have frequencies from all areas in every state. It is very easy to send information, just write down the frequency, what it is used for, who is using it. There aren't any requirements that it be typewritten. Just make your contribution legible. Very easy to do and only a few minutes of your time.

Our congratulations to Robert (TX-076) for finally finishing at The University of Texas, Austin. Now maybe he can get a real job and buy some decent radios.

## TENNESSEE

**********

Received the following contribution from Steven (TN-33) for the Knoxville Tennessee area.

### KNOXVILLE AND KNOX COUNTY Police, Fire, Medical & Emergency Services

| "A" | "B" | "C" | "D" | "E" |
|---|---|---|---|---|
| 856.2125 | 857.2125 | 858.2125 | 859.2125 | 860.2125 |
| 856.4375 | 857.4375 | 858.4375 | 859.4375 | 860.4375 |
| 856.7125 | 857.7125 | 858.7125 | 859.7125 | 860.7125 |
| 856.9375 | 857.9375 | 858.9375 | 859.9375 | 860.9375 |

The old Public Safety Frequencies are still used but for more informal communications. They are:

| | | | |
|---|---|---|---|
| Knoxville City: | F1: | 460.200 | City Dispatch |
| | F2: | 460.425 | Detectives |
| | F3: | 460.300 | Car to Car |
| | F4: | 460.400 | Mutual Aid |
| Knox County Sheriff: | F1: | 460.075 | |
| | F2: | 460.250 | |
| | F3: | 460.025 | |
| Knoxville Fire Dept: | | 154.070, 154.250 | |
| Area Fire Net: | | 45.160 | |
| TN Rural Metro: | | 153.950, 154.010, 154.430 | |

### DEDICATED FREQUENCIES FOR AREA EMERGENCY AGENCIES

| | | | | |
|---|---|---|---|---|
| CIVIL DEFENSE: | Emergency | 45.360 | MEDICAL NET: | 155.280 |
| | Administration | 45.440 | | 155.205 |
| | Knox County | 37.900 | | 155.295 |
| KNOX VOL. RESCUE SQUAD: | | 37.900 | | 155.340 |
| MEDCOM: | | 155.205 | | 155.220 |

| | |
|---|---|
| LIFESTAR (UT Hospital Air Amb.): | 155.295 |
| MEDFLIGHT (Air Ambulance): | 348.600 |
| Red Cross: | 47.420 |
| NOAA Weather Service: | 162.475 |

TENNESSEE HIGHWAY PATROL

| | | | | |
|---|---|---|---|---|
| F1 | Dispatch | 42.400 | Additional: | 154.665 |
| F2 | Mobile-Base | 42.280 | | 154.680 |
| F3 | Dispatch | 42.560 | | 154.935 |
| F4 | Admin. | 42.360 | | 158.730 |
| F5 | | 45.580 | | |

### KNOXVILLE AREA POLICE CODES AND SIGNALS

**CODE SIGNALS**

1. Escort to Headquarters
2. Call Headquarters
3. Change to "B" Channel traffic from _____
4. Call Your Office
5. Report to your Office
6. Call - Telephone
7. EMERGENCY - Serious Condition
8. Meet
9. Disregard
10. Rush - Quick Action Desired
11. Info. requested - Conf
12. Reply via phone, TWX,CW,Etc.
13. Blocked driveway
14. Blocked alley
15. illegal parking
16. Traffic Jam
17. Reckless driver

**ACTION TAKEN CODES**

A. Report submitted
B. Unable to locate complainant
C. Unable to locate address
D. Unable to locate suspect
E. No police action needed
F. Problem settled
G. Advise proper agency to contact
H. Vehicle checked all right
I. Person checked all right
J. Property checked all right
K. Verbal warning
L. Issued traffic citation
M. Made arrest
N. Made contact report
O. Assisted officer
P. Call handled by other agency
Q. Other
R. Message delivered
S. Message delivered; left note

18. Speeding car
19. Abandoned vehicle
20. Assist motorist
21. Open door
22. Open window
23. Lights out
24. Repeater off Channel ____
25. Repeater on Channel ____

| SIGNAL | MEANING |
|---|---|
| 10-1 | Receiving poorly |
| 10-2 | Receiving well |
| 10-3 | Stop transmitting |
| 10-4 | Acknowledgment |
| 10-5 | Relay |
| 10-6 | Busy |
| 10-7 | Out of service |
| 10-8 | In service |
| 10-9 | Repeat-conditions bad |
| 10-10 | Out of service-subject to call |
| 10-11 | Out of service to eat |
| 10-12 | Officials or visitors present |
| 10-13 | Advise weather & ground conditions |
| 10-14 | Convoy or escort |
| 10-15 | Have prisoner in custody |
| 10-16 | Pick up prisoner at_____ |
| 10-17 | Pick up papers at_____ |
| 10-18 | Complete present assignment as quickly as possible |
| 10-19 | Return to your station |
| 10-20 | What is your location? |
| 10-21 | Call this station by phone |
| 10-22 | Take no further action; last information |
| 10-23 | Escaped prisoner |
| 10-24 | Trouble at station; unwelcome visitors; all units in vicinity report at once |
| 10-25 | Vehicle stop & check |
| 10-26 | Loud party |
| 10-27 | Vandalism |
| 10-28 | Check full registration |
| 10-29 | Check for wanted |
| 10-30 | Does not conform to rules and regulations |
| 10-31 | Is lie detector available? |
| 10-32 | Is drunkmeter available? |
| 10-33 | Emergency traffic at this station - clear |
| 10-34 | Clear for local dispatch |
| 10-35 | Confidential information |
| 10-36 | Correct time |
| 10-37 | Operator on duty |
| 10-38 | Sick person |
| 10-39 | Injured person |
| 10-40 | Hostage situation |
| 10-41 | Missing person |
| 10-42 | Criminal trespassing |
| 10-43 | Want officer-investigation |
| 10-44 | Stolen vehicle |
| 10-45 | Auto wreck property damage |
| 10-46 | Auto wreck - injury |
| 10-47 | Send ambulance |
| 10-48 | Send wrecker |

| SIGNAL | MEANING |
|---|---|
| 10-49 | Driving while drunk |
| 10-50 | No traffic here |
| 10-51 | Strong arm robbery |
| 10-52 | Armed robbery |
| 10-53 | Hit and run |
| 10-54 | Arrest & hold for _____ |
| 10-55 | Larceny |
| 10-56 | Prowler man on premises |
| 10-57 | Alarm |
| 10-58 | Public drunk |
| 10-59 | Fight |
| 10-60 | Attempted suicide |
| 10-61 | Suicide |
| 10-62 | Murder |
| 10-63 | Kidnapping |
| 10-64 | Rape |
| 10-65 | Attempted rape |
| 10-66 | B & E - Business |
| 10-67 | B & E - Residence |
| 10-68 | B & E - Vehicle |
| 10-69 | B & E - Machine |
| 10-70 | Shoplifter |
| 10-71 | Bad check |
| 10-72 | Riot |
| 10-73 | Road block |
| 10-74 | Lost property |
| 10-75 | Deliver message |
| 10-76 | Do you have traffic for |
| 10-77 | Civil Defense test |
| 10-78 | Civil Defense - Air attack Probable |
| 10-79 | Civil Defense - Attack probable |
| 10-80 | Cutting scrape |
| 10-81 | Shooting scrape |
| 10-82 | Disorderly conduct |
| 10-83 | Domestic trouble |
| 10-84 | Juvenile problem |
| 10-85 | Disturbance |
| 10-86 | Fire |
| 10-87 | Insane person |
| 10-88 | Child abuse |
| 10-89 | Indecent exposure |
| 10-90 | Suspicious person |
| 10-91 | Dead person |
| 10-92 | Bicycle investigation |
| 10-93 | Molester |
| 10-94 | Assault |
| 10-95 | Firecrackers |
| 10-96 | Property check |
| 10-97 | Arrived at scene |
| 10-98 | Finished with last assignment |
| 10-99 | Boat investigation |

1. Knox County and City Police use Military Time System
2. "1Ø" prefix is sometimes dropped
3. Long string of numbers are either times or report numbers
4. VIN = Vehicle identification number

Thanks Steve, that should about cover the Knoxville area for anyone passing through on their way to the Smokies for the beautiful Fall season.

**********

Guess what folks. That is all the information that I have on hand at this time. In order to keep this column going we need to have information to print. I received word from Ken Winters (TX-154) that he will be sending me some files via Compuserve's Easyplex. In case you don't remember or if you are new to the Dallas/Ft Worth area he publishes the D/FW FREQUENCY LIST. His address is:

KEN WINTERS N5AUX
53Ø7 Marshfield Ct.
Arlington, TX 76Ø16

I am not sure of the exact price of the book now but I think it is around $2Ø.ØØ. The book is a database listing by Service and Frequency and includes just about anything^P that you can monitor from a scanner or by general coverage receivers. If you have one of the newer radios that cover a wide frequency range and wonder what you can listen to in the expanded range - Well, this is the book you want.

Since I have the space I will run through some of the other books that I have information on that are available for the South Central area. They are:

POLICE CALL

Available from you local RADIO SHACK or HOLLINS RADIO DATA, P.O. Box 35ØØ2, Los Angeles, California 9ØØ35. This is THE BOOK that all scanner users should own. Comes out yearly and includes all Police, Fire, and EMS services that are licensed by the FCC.

Volume 7
Alabama, Arkansas, Louisiana
Mississippi, Oklahoma, Tennessee
Texas

Volume 4
Kentucky

SCANNER RADIO LISTINGS
REGIONAL DIRECTORY

Available from FOX MARKETING, INC. 4518 Taylorsville Rd., Dayton, OH 45424-2497. And possibly some local dealers. You can call 1-8ØØ-543-7892 for more information on availability. These books are published by Norman H. Schrein and cover much the same as Police Call but in a different format with some extras. Norman has tried to list the input to repeaters and has listed mostly confirmed frequencies. These books are much easier to read and use than Police Call.

Great Lakes Edition
Kentucky

Southeastern US
Alabama, Arkansas, Louisiana,
Mississippi, Tennessee

SCANNER RADIO LISTINGS
STATE & METRO EDITION

Available from the above address by Fox Marketing. These books may not be as current as the Regional Directory or Police Call but include almost the complete FCC listings. Active frequencies have been checked and are very complete as of their published date. Want to know what frequency Bob's Plumbing service operates on, this is the book. Includes almost anything you would want to monitor. At this time I know of only the following areas being covered:

Houston/Beaumont,TX
Oklahoma City/Lawton, OK

Generally several counties around the major cities listed will be covered.

These are the only books that I know of being published at this time. If you really want to get into the frequency list you can always buy the microfiche from either Grove Enterprises, 14Ø Dog Branch Road, Brasstown, N.C. 28ØØ2 or Department of Commerce - National Technical Information Service, Springfield, Virginia, 22161. Request a catalogue from NTIS before you order. You have to know what you want before you order from

these people, this is the Federal Government and they have many items for sale and only go by Order Number. Your money is the limit in this case. They have several data files that may be ordered and I don't have a current price on any of them. I will give you the last price as of January 1, 1986.

| | |
|---|---|
| Master Frequency Data Base<br>The whole thing | $488.00 |
| Licensee Name Index<br>Just the name,city,frequency,Call Sign<br>This is the one file that I purchase from NTIS | 32.00 |
| State Index to Non-Government Master Frequency<br>By State,City,Frequency,Name,Call Sign | 32.00 |
| Callsign Index to Non-Government Master Frequency<br>By Call Sign | 32.00 |

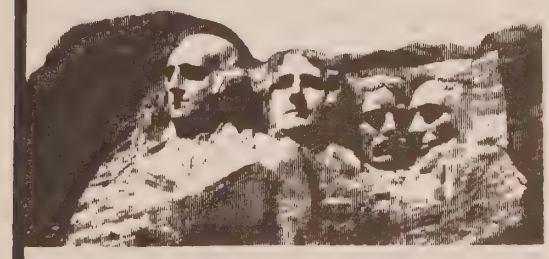
From Grove Enterprises you can order the following:

| | |
|---|---|
| FCC Frequency Master File | $175.00 |
| FCC State Index<br>This I purchase from Grove. | 17.50 |
| FCC Call Sign Index | 17.50 |

All of these files cover the 50 states and are the complete FCC license listings. You have to hunt in wierd places for some of the frequencies that you may want but it is worth it. You also have to have a Microfiche viewer which cost an additional $100.00 or so. You may use a viewer at your Public Library but that is very inconvenient

If there are any other frequency information sources for the areas that are covered in this column please notify me of them. I will pass on the information whenever I have room to do so.

-=ED=-



# PUBLIC SAFETY NORTH CENTRAL

**Send Public Safety and Special Emergency frequencies, radio system details and questions as follows—Iowa, Kansas, Minnesota, Missouri, Nebraska, North and South Dakota:**

**Michael W. Scheel, 25265 35th Ave, Walcott IA 52773**

Welcome to August and the North-Central area.

IMPORTANT INFORMATION

New address for Public Safety North-Central

Effective now!

25265 35th AVE
Walcott, IA 52773

**********

Because of a county wide readdressing of rural residences for the Sheriff's new 911 dispatching system. I have a new address. I am still at the same house only the address is different. Mail addressed to the old will still get here thou.

****** IOWA

911 in Scott County

As noticed aboved. The county has a new rural numbering for residences and businesses in the county. The 911 system is due to start in September. With it the sheriff communications has a new console for dispatching. Several new transmitters in the county are to be added mainly for better fire (154.220) and EMS (155.340, possiblely 155.400) coverage. While Davenport and Bettendorf has a

separate answering point with their own system. Le Claire Emergency Center will only get the information second-hand though the county's. Bettendorf came on line back in January of this year, while the rest will start in September. (MWS IA-011)

Johnson County

When the county has a EMS call in the county and only the local fire EMTs are the scene. The county will cross patch fire and EMS channels (154.340 and 155.205). So even with myself over 50 miles away, I can copy both sides of the conversations. (MWS IA-011))

******* KANSAS

Butler County Profile Part Five
(John KS-036)

| | | | | | |
|---|---|---|---|---|---|
| 39.240 | Benton | | Benton PD<>BU SO | S | |
| 39.900 | Benton | KQS720 | Emerg.&City Services | S | Benton |
| 39.240 | Douglass | | Douglass PD<>BU SO | S | |
| 39.460 | Douglass | KDY278 | KS Intersysem | S | Douglass |
| 39.580 | Douglass | KDY279 | Douglass Pol./Fire B<>M | S | Douglass |
| 39.240 | Leon | | Leon PD<>BU SO | S | |
| 39.580 | Leon | | Emergency Services | S | |
| 155.760 | Remington | WZJ691 | USD 206 | S | Whitewater |
| 39.240 | Rose Hill | | Rose Hill PD<>BU SO | S | Rose Hill |
| 39.500 | Rose Hill | | Rose Hill FD B<>M | H,B | |
| 39.700 | Rose Hill | | Rose Hill FD | H,M | |
| 153.775 | Rose Hill | KNIL658 | Input>154.995 | I | Rose Hill |
| 154.995 | Rose Hill | KNIL658 | Rose H./Ando. PD B<>M | R | Rose Hill |
| 39.240 | Towanda | KKL556 | Tow. PD B<>M<>BU SO | S | Towanda |
| 33.060 | Towanda | KCR929 | USD 375 | S | Towanda |
| 39.180 | Towanda | KNAW416 | City Services | S | Towanda |
| 39.240 | Whitewater | | Whitewater | S | Whitewater |
| 39.580 | Whitewater | | Emer.SVC<>Newton AMB. | S | Whitewater |
| | Utilities | | | | |
| 153.515 | K.G.& E. | | Eldorado B<>M | S | Eldorado |
| 451.325 | S.W. Bell | | Tel. Maint. | R | Andover |

That's for the profile on Bulter County Kansas.

***** Minnesota

Minneapolis, MN
By M.R.H.

| | | |
|---|---|---|
| 33.820 | Minneapolis Fire (not used anymore) | KAA754 |
| 39.580 | use ? | KU4875 |
| 39.700 | use ? | KU4875 |
| 45.280 | School Buses | KNBN591 |
| 45.660 | Hennepin County Sheriff Intersystem (Base only) | WSL621 |
| 153.830 | Fire Tactical (HTs only) | KZV213 |
| 153.875 | use ? | KNIG676 |
| 154.010 | Metro Fire Intersystem | KB50122 |
| 154.055 | Sanitation Dept (license & Consumer Services, Health Dept-Dog Catcher, Recycling Dept,Mn Age & Opportunity Center (MAO)) | KJQ987 |
| 154.235 | Minneapolis Fire Ch#2 Administrative Repeater (154.130) | KZV213 |
| 154.295 | Statewide Fire Mutual Aid Intersystem | KZV213 |
| 154.340 | Minneapolis Fire CH#1 Primary Repeater (153.890) | KZV213 |
| 155.100 | Traffic Engineering | KBK972 |
| 155.370 | Point to Point Intersystem (Base only) | WRE524 |
| 155.475 | Statewide Police Emergency Intersystem (MINSEF Cross Channel Patched with Metro Emergency Police Intersystem 460.275 | WRE524 |
| 158.910 | Minneapolis Police (use ?) | KZ6289 |
| 158.925 | ? | KJ9777 |
| 159.150 | Minneapolis Police Repeater (use ?) (158.730) | KYG531 |
| 453.075 | ? | KST234 |
| 453.225 | Street & Paving Department Ch#2 | KST234 |
| 453.325 | Parks Department Ch#1 | KST234 |
| 453.325 | Parks Police Radio Ch#9 | KST234 |
| 453.675 | Water Department Ch#3 | KXJ317 |
| 453.775 | Sewer Department Ch#4 | KXJ317 |

| | | | |
|---|---|---|---|
| 460.025 | Minneapolis Police | Ch#1 Southside | KYF400 |
| 460.100 | " " | Ch#2 Northside | KYF400 |
| 460.175 | " " | Ch#3 Northeast | KYF400 |
| 460.250 | " " | Ch#4 car to car | KYF400 |
| 460.350 | " " | Ch#5 Digital terminals | KYF400 |
| 460.500 | " " | Ch#6 Digital terminals | KYF400 |
| 460.425 | " " | Ch#7 Information/ St. Paul PD | KYF400 |
| 460.275 | " " | Ch#8 Metro Emergency | KYF400 |

****** MISSOURI

Sullivan Mo. area Profile
Michael (MO-089)

155.370 Intersysem

Bourbon PD, Crawford County Sheriff, Franklin County Sheriff
Missouri HP, Sullivan PD

155.475 National Police Mutual Aid

same as above

155.700 Sullivan PD Dispatch

155.730 Sheriff Intersystem

same as 155.370/155.475

155.835 Bourbon PD, Crawford County Sheriff Dispatch
155.160 St. Clair Ambulance
Union Ambulance
Washington Ambulance
Owensville Ambulance
155.220 North Crawford County Ambulance
South " " "
Owensville Ambulance
St. Clair Ambulance
Union Ambulance
Washington Ambulance
Sullivan Ambulance
155.340 statewide HEAR same as 155.160/155.220

155.730 North Crawford County Ambulance
South Crawford County Ambulance

154.235 Bourbon FPD, Sullivan FPD, St. Clair FPD, Cuba FPD, Steelville FPD,

154.280 same as 154.235

154.430 same as 154.235

155.835 Bourbon FPD, Cuba FPD, Steelville FPD

All fire and ambulances in Crawford County are dispatched by the Sheriff, on the main channel of 155.835 for fire, and 155.730 for ambluances.

****** NEBRASKA not yet
****** NORTH DAKOTA not yet
****** South Dakota not yet

****** MISC.: that is it for another nonth. -30-

# PUBLIC SAFETY—NORTH EAST

**Send Public Safety amd Special Emergency frequencies, radio system details, and questions as follows—New England States, New York, Pennsylvania, New Jersey, Maryland, Deleware, and District of Columbia:**

**Gary Saffer, 6 Roach Road, Stoughton, MA 02072**

Welcome to the august edition of PSNE. This mont's column will consist mostly of a report of the Westchester County New York Police and Fire systems. I'm going to limit my typing to this month's corrections and retyping part of the Westchester info as I'm trying to type with a broken wrist courtesy of a violent patient.
First from Lohr McKinstry some corrections to Marshall Cubitts NYSP info in the May issue.

155.595 is the Troop B car to base frequency not statewide barracks to car as reported. Barracks to car is 154.695
Statewide car to car is 154.665 not154,865
under county and local frequencies Lohr reports the following changes:
Franklin County Sheriif's Dept. uses 156.210 R not 155.700 or 155.940
Malone Village uses 159.210 for dispatch and 156.210 only for intersystem communication. Malone Village has units 1-6.
Lohr also sends in the following;
New York State Police (Malone) Units 1B-40 to 1B-45 154.905B/155.595M
154.695 Statewide NYSP Bulletins/Emergencies
155.370 Statewide Interagency
155,565 Statewide NYSP Bureau of Criminal Investigation
Thank you Lohr for those updates.
Jeff Eastburn sent in the clarifications to his Pennsylvania and Delaware info but it arrived to late for last month's column, I've included it here and must take responsibility for any errors that appeared in last month's PA and DE info.
The 10 codes are used by both the PA and DE State Police, with more use by the DSP. The Alphabet code is used by the DSP. With the exception of the DSP, Wilmington PD and New Castle County Fire all frequencies are Pennsylvania agencies. Add Avondale PA fire with a freq. of33.78. and York City PA dispatch on 156.570.

## Westchester County NY Public Safety

This information is a combination of submissions from Carl Gerosa III NY-117 and Warren Silverman NY-214. The police info is from Warren the fire info is from Carl. Note the type change with Carl's info, I used his info as submitted,without retyping.

### Deptatment of Public Safety Services

| | | | |
|---|---|---|---|
| Dispatch | F1 | KEh-748 | 155.310 R |
| Car to Car | F2 | KEH-748 | 155.310 S |
| Alt. Dispatch | F3 | KEH-749 | 155.550 R |
| Car to Car | F4 | KEH-749 | 155.550 S ? |
| Intersystem | | KNDA_334 | 155.730 S |
| Correctional Div. | | KRR-25 | 154.995 R |

NOTE: The Distric Attorney's office and many local depts. may utilize 155.310 R.

### Local Police Departments

| | | | | | |
|---|---|---|---|---|---|
| Ardsley | KED-651 | 155.730 | N.Tarrytown | KEA-434 | 37.100 |
| Bedford | KEB-457 | 155.25 | Ossining | KEB-208 | 37.100 |
| Briarcliff Manor | KEC-363 | 37.100 ? | Peekskill | KYW-843 | 154.785 |
| Bronxville | KEB-458 | 155.490 | Pelham | KEB-272 | 155.250 |
| Dobbs Ferry | KEB-216 | 155.730 | Pelham Manor | KEB-209 | 155.250 |
| Eastchester | KEA-950 | 155.490 | Pleasantville | KEC-547 | 155.250 |
| Elmsford | KEA-307 | 155.730 | Port Chester | KEB-908 | 155.010 |
| Greenburgh | KEA-959 | 155.730R | Rye | KEB-266 | 155.010 |
| Harrison | KNGJ-632 | 155.895R | Ryebrook | | 155.010 |
| Hastings-on-Hudson | KEB-453 | 155.730 | Scarsdale | KEA-443 | 155.490 |
| Irvington | KEB-583 | 155.730 | Somers | | 154.785 ? |
| Larchmont | WNDQ-947 | 154.775R | Tarrytown | KEB-268 | 155.730 |
| Lewisboro | KTH-596 | 155.250 | Tuckahoe | KEB-448 | 155.490 |
| Mamaroneck | WNCU-453 | 154.755 | White Plains | KEB-301 | 460.400R |
| Mamaroneck-Vill | KNGU-699 | 154.755 | White Plains | KEB-301 | 460.425R |
| Mt. Kisco | KEA-805 | 155.250 | Yonkers | KJR-433 | 453.475R |
| Mt.Pleasant | | 155.880 | Yonkers | " | 453.475R |
| Mt. Vernon | KEA-501 | 460.275R | Yonkers | " | 453.925R |
| New Castle | | 158.820R | Yorktown | KYW-845 | 154.785 |
| New Rochelle | KEA-351 | 155.130 | N. Castle | KNJB-581 | 155.775 |

### WESTCHESTER COUNTY FIRE DEPTS.

Radio Channels

F-1 46.26 Countywide dispatch channel used by all depts. except: Ardsley (46.52), Elmsford (153.98), Harrison (158.895), Hastings (156.), Mt. Vernon (154.145), Scarsdale (154.1), and Yonkers (46.5).

F-2 46.14 Countywide mutual aid chann used by all depts.

F-3 45.88 Used for inter-county mutual aid and by the Fire Control Center

33.96 Used for tone alerting by Eastchester, Harrison, Irvington, Millwood, Mt. Kisco, Pelham Manor, Pound Ridge, and Purchase

46.42 New countywide fireground channel

Fire COntrol Center

Westchester's Fire Control Center "60 CONTROL" is located on the Grasslands Reservation in Valhalla and coordinates fire activites and mutual aid. The transmitting tower is on the reservation with remotes in Yonkers and Yorktown.

Radio Codes

10-1 Call H.Q. by Phone
10-2 Report to H.Q.
10-3 Test Alerting System
10-4 Acknowledgement
10-5 Repeat Message
10-6 Busy-stand by
10-7 Verify Address
10-8 In Service by Radio
10-9 Location
10-10 EMERGENCY-Clear the Air
10-11 Request Radio Test
10-12 Aided Case
10-13 Cover .... Fire Dept. for Mutual Aid
10-14 Meeting/Drill/Special Detail
10-15 Dispatcher #.... Report to Fire Control Center
10-16 False Alarm
10-17 Responding to Alarm
10-18 Returning from Alarm
10-19 On the Scene
10-20 Proceed with Caution
10-21 Reported Working Fire
10-22 Structure Fire
10-23 Rubbish Fire
10-24 Vehicle Fire
10-25 Brush Fire
10-26 Other Emergency-A Wash Down -B Drowning -C Resuscitator
10-27 Send Police to Scene
10-28 Request Arson Investigator
10-29 Report Progress
10-30 Emergency Over/Fire Under Control
10-33 Additional Manpower Requested
10-35 Rescue/Extrication Call
10-40 Unit Out at Residence
10-45 Fire Fatality
10-50 Request Arson Investigator
10-68 Heat Complaint
10-84 On the Scene
10-88 Bomb Scare

## WESTCHESTER COUNTY FIRE APPARATUS LIST

AMBULANCES

1 Hastings
2 Armonk
3 Mohegan Lake
4 Croton
5 Pelham
6 Mohegan Lake
7 Briarcliff Manor
8 Verplanck
9 Bedford
10 Hawthorne
11 Somers
12 Somers
13 North Tarrytown
14 Briarcliff Manor
15 Verplanck

COUNTY CONTROL Cars

1 Coordinator
2-7 Deputy Coordinators
8 Chief Dispatcher
9 Asst. Chief Dispatcher
10 Asst. Chief Dispatcher
11 Chief Driver

CHIEF CARS

2011-3 Ardsley
2021-3 Armonk
2031-3 Bedford Hills
2041-7 Bedford
2051-3 Briarcliff Manor
2061-6 Chappaqua
2071-3 Croton Falls
2081-3 Croton
2091-8 Dobbs Ferry
2101-8 Eastchester
2111 Elmsford
2121-5 Fairview
2141-2 Goldens Bridge
2151-5 Greenville
2161-3 Harrison
2171-3 Hartsdale
2191 Hawthorne
2201-3 Irvington
2211-3 Katonah
2221-4 Larchmont
2231-3 Mamaroneck Town
2241-3 Mamaroneck
2251-6 Millwood
2261-3 Mohegan Lake
2271-3 Montrose
2281-5 Mount Kisco
2291-4 Mount Vernon "Cars 1-4"
2301-6 New Rochelle
2311-3 North Tarrytown
2321-4 North White Plains
2331-4 Ossining
2341-3 Peekskill

| | |
|---|---|
| 2351 | Pelham |
| 2361-8 | Pelham Manor |
| 2371-7 | Pleasantville |
| 2381 | Pocantico Hills |
| 2391-9 | Port Chester |
| 2401-3 | Pound Ridge |
| 2411-3 | Purchase |
| 2421-4 | Rye |
| 2431-4 | Scarsdale |
| 2441 | Somers |
| 2451-6 | South Salem |
| 2461-3 | Tarrytown |
| 2471-3 | Thornwood |
| 2481-7 | Valhalla |
| 2491-3 | Verplanck |
| 2501-2 | West Harrison |
| 2510-9 | White Plains |
| 2521-2 | Yonkers "Battalions 1-2" |
| 2531-3 | Yorktown |
| 2551 | Buchanan |
| 2561 | Vista |
| 2581 | Banksville |
| 2641 | Metro North Commuter R.R. |

CIVIL DEFENSE UNITS

| | |
|---|---|
| CD-3 | County Command Post Van |
| 445 | Greenburgh Light Truck |
| 446 | Greenburgh Cascade/Command Truck |

ENGINES

| | |
|---|---|
| 1-2 | Pelham Manor |
| 4-5 | Pelham |
| 6 | Pelham (Res.) |
| 7 | County Fire Training Center |
| 10-3 | Harrison |
| 15 | Croton (Res.) |
| 17-20 | New Rochelle Spares |
| 21-5 | New Rochelle |
| 26 | New Rochelle Spare |
| 27-31 | Eastchester |
| 32 | Eastchester Spare |
| 33-5 | Larchmont |
| 36-7 | Mamaroneck Town |
| 38-42 | Mamaroneck |
| 43-6 | Hastings |
| 47-50 | Dobbs Ferry |
| 51 | Mamaroneck Town |
| 52 | West Harrison |
| 53 | Scarsdale Spare |
| 54-6 | Scarsdale |
| 57 | Scarsdale Spare |
| 58-64 | Port Chester |
| 65-8 | White Plains |
| 69 | White Plains Spare |
| 70-1 | White Plains |
| 72 | White Plains Spare |
| 73 | White Plains (res.) |
| 74-5 | North White Plains |
| 76-80 | Tarrytown |
| 81-3 | Valhalla |
| 85-7 | North Tarrytown |
| 88-9 | Thornwood |
| 90-1 | Pleasantville |
| 92-4 | Briarcliff Manor |
| 96-101 | Ossining |
| 102-6 | Mount Kisco |
| 107-10 | Bedford |
| 111-3 | Pound Ridge |
| 114 | Katonah (res.) |
| 115-7 | Katonah |
| 118-20 | Croton |
| 121 | Montrose (res.) |
| 122-3 | Montrose |
| 124 | Montrose (res.) |
| 125 | Montrose |
| 126-8 | Verplanck |
| 130-4 | Peekskill |
| 135 | Peekskill Spare |
| 137 | Elmsford |
| 138-40 | Goldens Bridge |
| 141-3 | Vista |
| 144-6 | Chappaqua |
| 147-9 | Croton Falls |
| 150-3 | Greenville |
| 154-5 | Hawthorne |
| 156 | Grasslands Attack Unit |
| 157-8 | Banksville |
| 159 | Banksville (res.) |
| 161-2 | Buchanan |
| 163-5 | Ardsley |
| 166-8 | South Salem |
| 169-71 | Hartsdale |
| 173 | Fairview (res.) |
| 174-5 | Fairview |
| 176 | Fairview (res.) |
| 177-9 | Irvington |
| 180-4 | Somers |
| 185-6 | Somers Brush Trucks |
| 187-8 | Somers (res.) |
| 189-90 | Pocantico Hills |
| 191-4 | Rye |
| 196-7 | Bedford Hills |
| 198 | Bedford Hills (res.) |
| 199 | Bedford Hills |
| 201-6 | Mount Vernon "Engines 1-6" |
| 207 | Mount Vernon Spare |
| 211 | Bedford |
| 213 | Bedford Hills Correctional Facility |
| 215-7 | N.Y.S. Thruway Authority |
| 218-9 | Westchester Co. Airport |
| 224 | F.D. Roosevelt Hospital |
| 230-2 | Continental Village |
| 235-6 | Archville |
| 237 | Elmsford |
| 238-9 | Purchase |
| 242 | Ardsley Antique |
| 243 | Chappaqua (res.) |
| 244 | Millwood |
| 245 | Milwood Tanker |
| 246 | Millwood (res.) |
| 247-8 | Millwood |
| 250-7 | Mohegan Lake |
| 259-60 | Pleasantville |
| 263-4 | North White Plains (res.) |
| 265 | West Harrison |
| 266 | West Harrison (res.) |
| 270-1 | Yorktown (res.) |
| 272-5 | Yorktown |
| 276-7 | Yorktown (res.) |
| 278-9 | Yorktown |
| 285-9 | Armonk |
| 300-2 | Yonkers Spares |
| 303-4 | Yonkers |
| 305 | Yonkers Spare |
| 306-10 | Yonkers |
| 311 | Yonkers (res.) |
| 312-4 | Yonkers |
| 315-22 | Yonkers Sparea |
| 325 | Greenville |

FIELD SERVICES UNIT

| | |
|---|---|
| 1 | New Rochelle |

**PUBLIC SAFETY - NORTH EAST continued**

FIRE BOATS

| | |
|---|---|
| 2 | Mamaroneck |
| 3 | Rye |

FOAM TRUCKS

| | |
|---|---|
| 1 | Mount Vernon |

HOSE WAGONS

| | |
|---|---|
| 1 | Verplanck |

JEEPS

| | |
|---|---|
| 2 | Goldens Bridge |

LADDERS

| | |
|---|---|
| 1 | Fairview |
| 2 | Pelham |
| 3 | Chappaqua |
| 7 | County Fire Training Center |
| 12-3 | New Rochelle |
| 14 | New Rochelle Spare (old L-11) |
| 15 | Eastchester Spare |
| 16-7 | Eastchester |
| 18 | Somers |
| 19 | Mamaroneck Town |
| 20-1 | Mamaroneck |
| 22 | Hastings |
| 23 | Dobbs Ferry |
| 24 | Harrison |
| 25-6 | Rye |
| 28 | Scarsdale |
| 31 | Port Chester |
| 32 | White Plains |
| 33 | White Plains Spare |
| 34 | White Plains |
| 35 | White Plains (res.) |
| 36 | Irvington |
| 37 | Tarrytown |
| 38 | North Tarrytown |
| 39 | Pleasantville |
| 40 | Briarcliff Manor |
| 41-2 | Ossining |
| 44 | Croton |
| 45 | Peekskill |
| 46 | Hartsdale Spare |
| 47 | Hartsdale |
| 48 | Scarsdale |
| 49 | Valhalla |
| 51 | Yorktown |
| 53 | Purchase |
| 61 | Mount Vernon (res.) |
| 62-3 | Mount Vernon "Ladders 2-3" |
| 64 | Mount Vernon Spare |
| 68 | Yonkers (res.) |
| 69 | Yonkers Spare |
| 70-2 | Yonkers |
| 73 | Yonkers Tower Ladder |
| 74-5 | Yonkers |
| 76 | Yonkers Spare |
| 77 | Yonkers (res.) |

LIGHT TRUCKS

| | |
|---|---|
| 1 | Harrison |
| 2 | New Rochelle |
| 3 | White Plains |
| 16 | Mount Kisco |

MINI-ATTACKS

| | |
|---|---|
| 1 | Valhalla |
| 2 | Grasslands |
| 3 | West Harrison |
| 4 | Mamaroneck Town |
| 5 | Pleasantville (res.) |
| 6 | Armonk |
| 7 | Bedford |
| 8 | Yorktown |
| 9 | Bedford Hills |
| 10 | Millwood |
| 11 | Banksville |
| 12 | Goldens Bridge |
| 13-4 | Somers |
| 15 | Katonah |
| 16-7 | Croton Falls |
| 18 | Briarcliff |
| 19 | Thornwood |
| 20 | South Salem |
| 21 | Pound Ridge |
| 22 | Fairview (res.) |
| 23 | Continental Village |
| 24 | Montrose |
| 25 | Montrose (res.) |
| 27 | Hawthorne |

PATROLS

| | |
|---|---|
| 1 | North White Plains |
| 2 | Eastchester |
| 3 | Rye |
| 4 | Port Chester |
| 5 | Thornwood |
| 7 | Pleasantville |
| 8 | Croton Falls |
| 9 | Bedford |
| 11 | Banksville |
| 12 | Valhalla |
| 13 | Chappaqua |
| 14 | Hawthorne |
| 18 | Chappaqua |

QUADS

| | |
|---|---|
| 2 | Elmsford |
| 3 | Chappaqua |
| 8 | Purchase |
| 9 | Hawthorne |
| 10 | Mohegan Lake |

QUINTS

| | |
|---|---|
| 2 | Elmsford |

RESCUES

| | |
|---|---|
| 1 | Larchmont |
| 2 | Mount Vernon "Rescue 1" |
| 3 | Fairview |
| 4 | New Rochelle |
| 5 | Eastchester |
| 6-7 | Somers |
| 8 | Hawthorne (res.) |
| 9 | Valhalla |
| 10 | Mamaroneck (ambulance) |
| 11 | Tarrytown (res.) |
| 12 | North Tarrytown |
| 13 | Elmsford (ambulance) |
| 14 | Ossining |
| 15 | Mount Kisco |
| 17 | Katonah |
| 18 | Croton |
| 19 | Mamaroneck (ambulance) |
| 20 | Somers |
| 21 | South Salem |
| 22 | Vista |

| | |
|---|---|
| 24 | Goldens Bridge |
| 25 | Vista |
| 26 | Buchanan |
| 30 | Purchase |

SNORKELS

| | |
|---|---|
| 1 | Bedford Hills |
| 2 | Verplanck (w/ pump) |
| 3 | Mount Vernon "Snorkel 1" |

TANKERS

| | |
|---|---|
| 1 | Continental Village |
| 2 | South Salem |
| 3 | Goldens Bridge |
| 4 | Vista |
| 5 | Bedford Hills |
| 6 | Katonah rescue |
| 7 | Banksville |
| 8 | Croton Falls |
| 9 | Armonk |

TELE-SQUIRTS

| | |
|---|---|
| 1 | Fairview |
| 2 | Millwood |
| 3 | Vista (res.) |

TOWER LADDERS

| | |
|---|---|
| 1 | Thornwood (w/ pump) |
| 2 | Port Chester "AT-2" |
| 3 | Pelham Manor |
| 4 | Greenville |
| 5 | Pleasantville |
| 6 | White Plains (w/ pump) |
| 7 | Larchmont |
| 8 | Montrose "AT-8" (w/ pump) |
| 9 | West Harrison |
| 11 | New Rochelle |
| 14 | Mount Kisco |

UTILITY TRUCKS

| | |
|---|---|
| 1 | New Rochelle "2306" |
| 2 | White Plains |
| 3 | Valhalla |
| 6 | Bedford Hills |
| 7 | Fairview |
| 8 | Katonah attack unit |
| 9 | Mamaroneck |
| 10 | Purchase |
| 11 | Mohegan Lake |
| 12 | Buchanan |
| 13 | Mount Kisco |
| 14 | Croton |
| 15-20 | Yonkers |
| 21 | Yonkers mask service unit |
| 22 | Yonkers (res.) |
| 25 | Briarcliff |

# PUBLIC SAFETY—GREAT LAKES

**Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows—Illinois, Indiana, Wisconsin, Michigan, Kentucky, and Ohio:**

**David Wilcox, 1711 Excalibur Drive, Janesville, WI 53545**

This month in the PS-GL column we are going to feature Illinois, since that's all I've received input for in the past month. To start out, from Kurt IL-342 we have frequencies from the Carbondale area.

| | |
|---|---|
| Carbondale | |
| 154.070 | FIRE/COAL BELT FIRE DEPARTMENTS |
| 154.755 | POLICE DEPARTMANT FREQ. (1) |
| 155.640 | POLICE DEPARTMENT FREQ. (2) |
| 154.025 | PUBLIC WORKS |
| 155.025 | ESDA/MUTIAL AID |
| 155.055 | IREACH |
| 155.340 | MEMORIAL HOSPITAL/TRAUMA CENTER |
| JACKSON COUNTY | |
| 45.440 | ESDA |
| 154.040 | ESDA |
| 155.010 | SHERIFF |
| 155.100 | AMBULANCE PAGER |
| 155.220 | AMUBLANCE DISPATCH |
| 468.175 | SPECIAL EMERGENCY |
| STATE OF ILLINOIS | POLICE |
| 39.460 | LOW BAND POINT TO POINT |
| 39.500 | BASE TO CAR, CAR TO CAR |
| 42.500 | STATE CAR TO CAR, BDCST |
| 42.600 | STATE BASE TO CAR. CAR TO BASE |
| 42.680 | DIST 13 CAR TO BASE |
| 154.665 | DCI FREQ 1 |
| 154.680 | MEG SURVEILLANCE |

| | |
|---|---|
| 154.710 | MEG OPERATIONS |
| 154.905 | IDA UNITS DCI FREQ 2 |
| 154.935 | DIST 13 HIGH BAND |
| 154.950 | DCI FREQ 3 |
| 155.370 | POINT TO POINT |
| 155.460 | STATE CHANNEL 7 |
| 155.475 | ISPERN DCI FREQ 4 |
| 155.505 | STATE POLICE MOBILE REPEATERS |

MURPHYSBORO

| | |
|---|---|
| 153.890 | FIRE DEPT |
| 154.070 | COAL BELT FIRE DEPARTMENTS |
| 155.565 | POLICE DEPARTMENT |
| 39.600 | MBORO SECRET SQUIRREL FREQ |
| 154.115 | ESDA |

WILLIAMSON COUNTY

| | |
|---|---|
| 154.695 | DETECTIVE UNIT |
| 155.070 | SHERIFF |
| 156.090 | SHERIFF |
| 155.085 | AIRPORT ADMIN. ESDA RPTS |
| 45.240 | ESDA |
| 45.44 | ESDA |
| 153.905 | LOCAL GOVERMENT |
| 154.980 | LOCAL GOVERMENT |
| 155.085 | LOCAL GOVERMENT |
| 155.865 | LOCAL GOVERMENT |

EMERGENCY SERVICES DISASTER AGENCY (ESDA)

| | |
|---|---|
| 45.240 | POINT TO POINT |
| 45.280 | |
| 45.360 | |
| 45.400 | |
| 45.440 | |
| 154.040 | JACKSON COUNTY |
| 155.085 | ESDA REPEATERS |
| 155.025 | STATE MUTIAL AID/ CARBONDALE ESDA |
| 155.865 | SALEM ESDA |
| 154.115 | MBORO ESDA |

VARIOUS AGENCIES

| | |
|---|---|
| 31.200 | WPSP TACTICAL COMM |
| 450.612 | WPSP TACTICAL |
| 47.300 | HIGHWAY DEPT. |

Also from Kurt IL-342 we have a list of the Carbondale police departments radio assignments

| | | | |
|---|---|---|---|
| 88-00 | Cheif | 88-10 | Assist cheif |
| 88-20 | Patrol Lt. | 88-30 | Patrol Lt. |
| 88-40 | Patrol Lt. | 88-50 | Lt. |
| 88-70 | Patrol Services | 77-00 | Sup. of services |

PATROL
33-00 Watch Supervisor
33-10, 33-20, 33-30, 33-40, 33-50, Patrol units(Mobiles)
33-11, 33-21, 33-31, 33-41, 33-51, Patrol units(Footbeats)

CRIME SPECFIC UNITS (When active)
33-90, 33-91, 33-92, 33-93

INVESTIGATIONS
44-00 Supervisor
44-10, 44-20, 44-30, 44-50, 44-60 Detectives
44-90 Crime scene tech.

ADMINISRATION SUPPORT
55-10 Training Officer

TRAFFIC UNIT
66-00 Traffic SGT.
66-10 to 66-40 Traffic Units

EVIDENCE

| | | | |
|---|---|---|---|
| 44-80 | Evidence van | 44-40 | Evidence Tech |
| PK-22 | Ceader Lake Patrol | Parking-Pack #1, #2 | |
| 22-5 | Street Support | | |

ANIMAL CONTROL

77-11, 77-12 Animal Wardens

Thanks a lot Kurt for that great report on the Canbondale area. From Kevin IL-274 some updates reguarding the Illinois State of Frequencies that I printed in the May column.

All the 47.14, 47.30, 47.38 frequencies are used by the Illinois Dept. Of Transportation, the letters IDOT should replace "highway" and "Use/Unk".

158.955 Is a Paging Freq.

31.860 Is the old ILL. Dept. of Conservation (not DNR as in Wisc.) lo-band frequency. 151.280 and 151.445 are the repeater outputs and 159.300 and 159.375 are the inputs used in the new system.

453.350 and 458.300 were used the old Tollway system that has been replaced by the 800 MHZ System which appears at the top of the list.

44.920 Is the primary frequency used by the Illinois Dept. of Nuclear Safety. The dispatcher is located in Springfield and, as with the IDOT 47.MHZ and the ESDA 44.MHZ systems, is able to preform transmit/receive functions throughout the state by use of remote tran/rec. sites. Which are linked to the dispatch center by microwave and wireline links. DNS mobiles Utilize A Nora-Sam I.D. Prefix. Followed by a number when calling the dispatcher. Which I.D.'s as REAC- an Acronym, of witch Kevin's not sure of. The unit will give It'S I.D. and tell the Dispatcher which receive site he is closest to. Example: "REAC, this is Nora Sam 35 thru Zion." This Immediately lets the dispatcher know which of many receiver panels to un-mute, and allows him to communicate with that mobile unit.

37.360 Is used by the Dept. of Corrections as well as 37.16 & 37.22 .

39.460 Is used in areas outside of the North-East "Chicago area" as a point to point frequency. 155.370 is used in the Northeast portion of the state.

154.905 Is the primary frequency for the Il. Dept of Criminal Investigaion.

Thanks a lot Kevin for the corrections. Now we have somemore corrections from John IL-12 .

1905 and 1985 Mhz - are microwave links connecting I.S.P Dist 16 HQ(Pectonica) to a remote site (Stockton)

453.350 Used by "Corrections" facilities statewide.

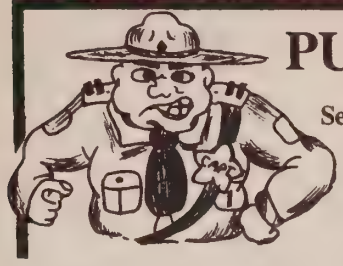
154.920 Not in use at Gurnee. (this freq. was in use by I.S.P Dist 2 some years back, but has since been reallocated. It is in use by Dist. 5 at Joliet. Limited low power use is also reported at the law enforcement academy in Springfield and at some state Bldgs. in downtown Chicago.)

Thanks alot John, also from John next month we will be getting a great report on some Illinois State Police News.

Till Next Month
Dave

*********
* Third *
* Annual *
* Summer *
* picnic *
* *
* * *

The All Ohio Scanner Club will hold it's Third Annual Summer Meeting and Family Picnic in Columbus, OH, on Saturday August 8th 1987. RCMA members are invited and welcome to attend. For details send a SASE to P.O. Box 2496, Springfield, Ohio, 45501-2496



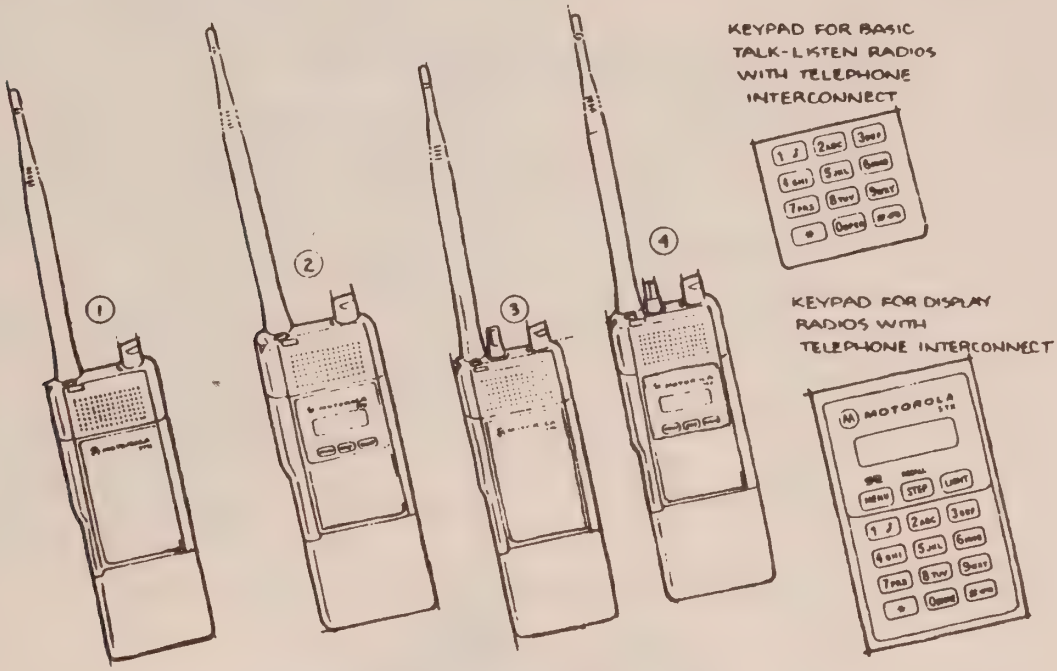
# PUBLIC SAFETY—SOUTH EAST

**Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows—Florida, Georgia, N. Carolina, S. Carolina, W. Virginia and Virginia:**

**Jorge L. Rodriguez, 1129 Castile, Coral Gables, FL 33134**

**Hello !** Welcome to the Southeast Public Safety Column for August, 1987. This month we conclude our material on the City of Miami's new 800 Mhz. radio system based on the new Motorola STX radio (fig. 1).

Beginning next month you can look forward to coverage for each of the states that comprise the Southeast Public Safety Region. This material and frequencies will come from F.C.C. file when member input is lacking

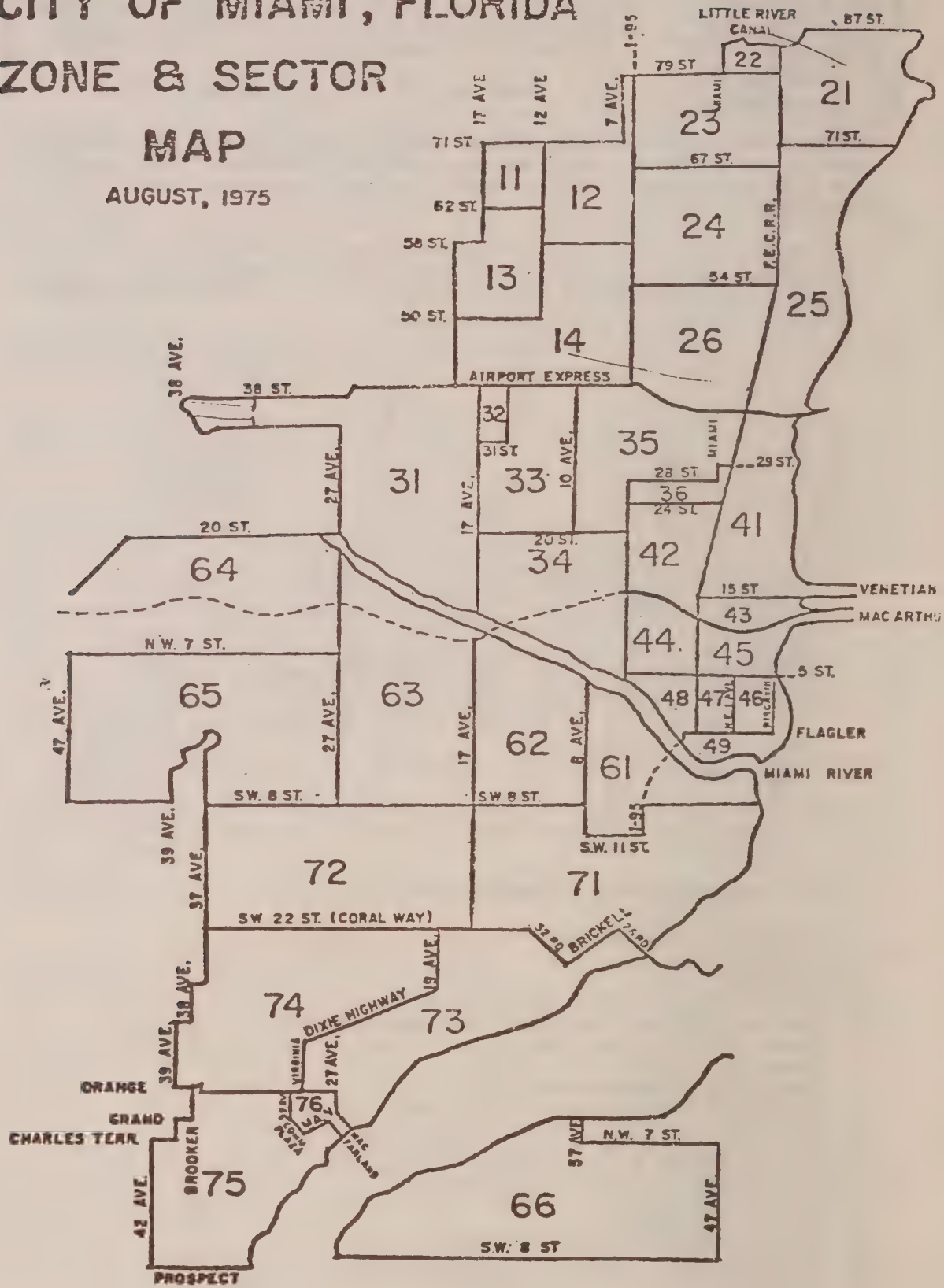



CITY OF MIAMI POLICE CAR NUMBERING

1 Mayor and Commissioners
2 City Manager
3 Chief of Police
4 Assistant Chief,Operations Division
5 Assistant Chief,Resources Management Division
6 Chief of Fire Department
7 Director of Communications
8 Assistant City Manager
9 Assistant Chief,Special Services Division
10 Assistant Director Of Communications
11 Deputy Chief,Unform Services Bureau
12 Communications Special Assignment
13 Deputy Fire Chief
14 Deputy Fire Chief
15 Deputy Chief,Field Services Bureau
16 Deputy Chief,Support Services Bureau
17 Major,Patrol Section
18 Major,Traffic Section
19 Major,Criminal Investigation Section
20 Major,Comm.Relations/Youth Serv.Sec.
21 Major,Administration Section
22 Major,Information Management Section
23 Major,Operations Support Section
24 Major,Special Investigation Section
25 Office of Professional Compliance

# DEPARTMENT OF POLICE
# CITY OF MIAMI, FLORIDA
# ZONE & SECTOR MAP

AUGUST, 1975




| | | | |
|---|---|---|---|
| 26 | External Affairs Office | 33 | Training Unit |
| 27 | Internal Security Unit | 34 | Recruitment & Selection Unit |
| 28 | Planning and Research Unit | 35 | Court Liaison Unit |
| 29 | Inspection Unit | 36 | Property Unit |
| 30 | Legal Unit | 37 | Computers Unit |
| 31 | Labor Relations Unit | 38 | Communications Unit |
| 32 | Public Information Unit | 39 | Records Unit |

40 Assistant City Manager
41 Motor Pool
43 Motor Pool
44 Motor Pool
90 Personnel Unit
91 Budget & Inventory Control
92 Off-Duty & Special Events
93 Permits & Alarm Ordinance
94 Urban Crisis
95 Crime Analysis (I.C.A.P)
96 Security Control
97
98
99 Federal Protective Service

100 Front Desk/Prisoner Processing, Shift A
101-199 Patrol Shift A
200 Front Desk/Prisoner Processing, Shift B
201-299 Patrol Shift B
300 Front Desk/Prisoner Processing, Shift C
301-399 Patrol Shift C
400-499 Canine (K-9)
500-574 Public Information
575-599 Internal Security
600-699 AIU/Traffic
700-799 Criminal Investigation Section
800-899 Enforcement
900-979 Public Service Aides
980-989 Office of Professional Compliance

1100-1199 Off Duty Assignments-Shift A
1200-1299 Off Duty Assignments-Shift B
1300-1399 Off Duty Assignments-Shift C
1400-1499 SWAT
1500-1599 Orange Bowl/Miami Stadium Events
1600-1699 Traffic Foot Beats
1700-1799 SPU 3 Wheel/Westcoaster/Horse
1900-1999 Homiside
3100-3199 Community Relations/Public Information/Juvenile/Missing Persons

A radio call number containing a zero will indicate a commanding officer or staff officer.

A radio call number ending in a zero will indicate a supervisor.

**Send Public Safety and Special Emergency frequencies, radio system details and questions for Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming to:**

**George N. Hoggatt, 17473 E. 16th Dr, Aurora, CO 80011**

ARIZONA (Mike AZ-074)

Phoenix Fire Department
ch. 1 154.190 dispatch
ch. 2 154.250 Phoenix fireground
ch. 3 154.070 Phoenix fireground
ch. 4 154.280 State mutual aid

ch. 6 154.310 Glendale and Peoria fireground
ch. 7 154.145 Tempe fireground
ch. 8 153.770 Tempe fireground

Phoenix FD dispatches for the cities of Glendale, Peoria and Tempe

Glendale FD units 50-59 or begin with 5
Peoria FD units 90-99 or begin with 9
Tempe FD units 70-79 or begin with 7

460.575 used by Phoenix for phone patch

Mesa Fire Department
ch. 1 154.340
ch. 2 154.235

Avondale Fire Department
154.220

Chandler Fire Department
154.430

Rural/Metro Fire Department a private contract fire department which covers the City of Scotsdale and all unincorporated areas of Maricopa County and Sun City
ch. 2 154.370 dispatch
ch. 3 154.400 fireground
ch. 7 460.625 Sun City

Unit numbers:
1-19 Scottsdale area
20-29 East County area
30-39 West County area

Maricopa County Sheriff
ch. 1 460.050 west
ch. 2 460.100 west car to car
ch. 3 460.150 east
ch. 4 460.200 detectives
ch. 5 460.175 east car to car
ch. 6 460.075 information
ch. 7 460.125 phone patch
ch. 8 159.090 search - Lake Patrol

unit numbers:
100-200 East Mesa
240-249 Avondale substation
270-279 Buckeye substation
280-289 Gila Bend substation
350-359 Sun City substation
390-399 Wickenburg substation
430-439 New River - Carefree - Fountain Hill substation
Lima units - Lakes and River Patrol

Phoenix Police
ch. 1 154.890 chase
ch. 2 154.775 information
ch. 3 155.790 detectives
ch. 4 155.370 400 district - south
ch. 5 155.070 500 district - central
ch. 6 155.640 600 district - north
ch. 7 155.520 700 district - east
ch. 8 155.430 800 district - west
ch. 9 155.700 900 district - northwest
ch. 12 155.610 car to car

Unit numbering corresponds with the first number of the districts. That is, 6 Adam 21 would be a unit from 600 district north

Phoenix PD detective and vice units
ch. 1 453.100
ch. 2 453.200

ch. 3 453.450
ch. 4 453.600
ch. 5 453.800

Tempe Police Department
ch. 1 155.685
ch. 2 155.835
ch. 3 154.965

Scottsdale Police Department
ch. 1 155.850
ch. 2 155.550

Mesa Police Department
ch. 1 155.010
ch. 2 154.815
ch. 3 155.130
ch. 5 154.950

Peoria Police Department - 453.650
Buckeye Police Department - 453.850
Gilbert Police Department - 460.450
Glendale Police Department - 156.210 Glendale PD has moved to 800 mhz but you can still hear dispatch on 156.210. Can anyone supply the new frequency (frequencies)?
Surprise/Youngtown Police Department - 453.275
Paradise Valley Police Department - 460.350
Chandler Police Department - 154.875
Avondale - El Mirage - Toleson Police Departments - 460.250
Arizona State University Police Department - 156.150
Pima - Salt River Indian Reservation Police Department
453.725, 453.975
State - Police Departments Interagency - 155.475, 460.375

Arizona Department of Public Safety (highway patrol)
460.025 District 6 Toltec
460.225 State
460.275 Criminal Investigations
460.300 District 10 freeways west of Phoenix
460.325 District 5 freeways Phoenix metro area
460.400 District 11 freeways Mesa area

UTAH (Jerold new member)

461.175 Gold Cross Ambulance
46.060 Salt Lake County Fire
46.100 Salt Lake County Fire #2
153.740 South Jordan City Fire
153.770 Midvale City Fire
154.175 Murray City Fire
154.205 Bountiful City Fire
154.235 Salt Lake County pagers
154.250 Ogden City Fire
154.250 West Jordan City Fire
154.310 Salt Lake City Fire #2
154.340 Salt Lake City Fire #3
154.385 Sandy City Fire
154.430 Salt Lake City Fire #1
154.965 North Salt Lake Fire
453.800 South Salt Lake Fire
460.625 West Valley City Fire
155.340 MEAR most hospitals, Life Flight
Med 1-10 in use
153.995 Salt Lake County Sheriff
154.100 American Fork City Police
154.650 Salt Lake County Sheriff #1
154.695 Utah Highway Patrol
154.725 University of Utah Police
154.785 Salt Lake County Sheriff #2
154.815 University of Utah Police
154.995 Alta Sheriff

155.040 Lehi City Police
155.130 Sandy City Police
155.190 Provo City Police
155.310 U.H.P. Web.Dav.Morg
155.370 Salt Lake County Sheriff #3
155.430 Orem City Police
155.505 U.H.P. Statewide
155.550 U.H.P. Uinta, Daggett
155.550 Prison, general
155.565 U.H.P. Garfield, Beaver
155.580 U.H.P. local
155.595 U.H.P. Boxelder, Cache
155.610 U.H.P. Coalville
155.625 U.H.P. Was.Ut.Cache
155.640 Davis County Sheriff
155.655 U.H.P. Cbn,Emry,Gnd
155.670 Bountiful City Police
155.700 U.H.P. State Law Net
155.745 U.H.P. car to car
155.865 Draper Police and Fire
155.910 U.H.P. Tooele, Wend
155.940 Springville City Police
155.955 Midvale City Police
155.970 South Salt Lake Police
156.030 Salt Lake County Sheriff
159.030 Salt Lake County Sheriff
159.090 West Jordan City Police
159.150 West Jordan City Police
453.950 Prison Twr / Twr
460.050 Salt Lake County Sheriff #6
460.075 South Salt Lake Police
460.100 Salt Lake County Sheriff #1
460.150 Salt Lake County Sheriff #2
460.200 Salt Lake County Sheriff #3
460.300 Salt Lake County Sheriff #4
460.350 West Valley car to car
460.375 Salt Lake County Sheriff #5
460.425 Murray City Police
460.500 Salt Lake County
45.050 Salt Lake County search and rescue
155.160 State and national search and rescue
453.750 Utah Transit Authority

# PUBLIC SAFETY—CALIFORNIA

**Editors: Mike Lussier, ID-001, and Dan Figueroa, CA-LA-359**
**P.O. Box 3962, Santa Fe Springs, CA 90670-1962**

This is the August 1987 PS-CA Column. The "magic number" is 4. We have lots of input, so let's put the frequency on stand by for routine traffic...

Switching to the Inquiry Channel: From John [CARI-063]: He lives in Wildomar (b/t Lake Elsinore and Temecula) and has the following questions: (1) What are the local government freqs for City of Lake Elsinore, Elsinore Valley Municipal Water District & Rancho CA Water District? (2) What is the So Cal Edison freq for the area? (3) How effective would a hand held freq counter (such as OPTO electronics unit) be in determining the base and mobile transmitters in the field?

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**PUBLIC SAFETY: CALIFORNIA continued**

(4) Riverside SO Lake Elsinore dispatches on "84.760" (?) What is the mobile freq? [EDITOR's NOTE: This may be a typo. We show RSO/Lake Elsinore is listed on 158.760 Mhz. Can anyone clarify?]

And from Bob [CAAL-042]: Recently while in LA, he heard LAFD/OCD tell a mobile unit to go "CVA" (on his MODAT). What does that mean?

From Lee [CASC-058]: Since last month's input, Sacto PD made some changes that even caught some of their officer's by surprise. Chan 5 is now a dispatch channel, taking the north portion of Chan 2 traffic and the south portion of Chan 3 traffic to make up a new area. Chan 8 is now supposed to be an info channel. Lee also has included some 900 code additions and unit identifiers (since last month):

| | | | |
|---|---|---|---|
| 905 | Traffic Control | 952 | Car Stripping |
| 923 | Indecent Exposure (Flasher) | 983 | Hazard |
| 945 | Assault | 994 | Explosive Device |

Lee further adds that in addition to the 900 Codes, SPD uses all Penal Code, Vehicle Code and Welfare & Institution Codes for dispatches.

BEAT UNIT - Foot patrol with HT's. Confined to downtown; K St Mall & Old Sacto area
MARINE UNIT - Boats on American & Sacramento Rivers
MOTOR UNIT - Primarily on vehicle accidents
SCHOOL UNIT - Assigned to schools
LINCOLN UNIT - Lieutenant
SAM UNIT - Sergeant
CSI UNIT - Crime Scene Investigate
CSO UNIT - Community Service Ofcr
IVY UNIT - Investigators
PAUL UNIT - Wagon
PARK UNIT - City park assignments
UNION UNIT - Unmarked plainclothes

From George [CATO-001]: Here is the CDF radio system using the new 80 channel Midland 70-482B radios. According to George, the 70-482B will scan the first 10 channels (i.e. 0 to 9) with Channel 0 as a priority channel. No matter which of the remaining 79 channels the unit is on,

when Channel 0 is activated, the radio switches to this channel. When field units wish to respond to Channel 0, they must switch to this channel. The "scan hold time" on the receiving mode is 2.5 seconds, & on the transmit mode, it is 5 seconds. The freq list below is for the Tuolumne/Calaveras CDF Ranger Unit. Each CDF region will have its own regional freq arrangement. George also suggests monitoring the first column of freqs on your scanner:

| CH | RECEIVE | TRANSMIT | USED FOR: |
|---|---|---|---|
| 0 | 151.175 | 159.450 | Tuolumne/Calaveras RU (Local Net) |
| 1 | 151.265 | 159.330 | CDF Region #4 (Region Net) |
| 2 | 151.355 | 159.300 | CDF State Net (Statewide) |
| 3 | 151.190 | 159.225 | Lassen/Modoc,Mendocino,Tulare & S Diego (Local) |
| 4 | 153.815 | 153.815 | Calaveras County TAC Net |
| 5 | 154.265 | 154.265 | OES White Net #2 |
| 6 | 151.460 | 159.390 | Madera/Mariposa & Sonoma RU (Local Net) |
| 7 | 168.750 | 168.750 | USFS Stanislaus & Cleveland NF's |
| 8 | 153.130 | 153.130 | San Joaquin County FD |
| 9 | 153.770 | 153.770 | Stanislaus & Santa Barbara County FD's |
| 10 | 151.220 | 151.220 | CDF "Red Net" (HT's) |
| 11 | 151.355 | 159.300 | Statewide Car-to-car |
| 12 | 151.160 | 159.270 | Shasta/Trinity RU (Local Net) |
| 13 | 151.175 | 159.450 | Tuolumne/Calaveras RU |
| 14 | 151.175 | 159.285 | Tuolumne/Calaveras RU (Local Car-to-car) |
| 15 | 151.190 | 159.225 | Lassen/Modoc,Mendocino,Tulare, SD (Car-to-car) |
| 16 | 151.250 | 159.330 | Siskiyou RU (Local Net) |
| 17 | 151.250 | 159.405 | Siskiyou RU (Local Car-to-car) |
| 18 | 151.265 | 159.330 | Region #3 (Region Net) |
| 19 | 151.280 | 151.280 | CDF Air Net (Blue) |
| 20 | 151.295 | 151.295 | CDF Air Net (Green) |
| 21 | 151.310 | 151.310 | CDF Air Net (Yellow) |
| 22 | 161.325 | 159.360 | CDF Region #2 (Region Net) |
| 23 | 151.325 | 159.315 | CDF Region #2 (Region Car-to-car) |
| 24 | 151.340 | 159.315 | Lake/Napa RU (Local Net) |
| 25 | 151.340 | 159.345 | Lake/Napa RU (Local Car-to-car) |
| 26 | 151.370 | 159.285 | San Mateo/Santa Cruz RU & Tehama/Glenn RU |
| 27 | 151.385 | 159.270 | CDF Region #1 (Region Net) |
| 28 | 151.385 | 159.360 | CDF Region #1 (Region Car-to-car) |
| 29 | 151.400 | 159.375 | Santa Clara & Butte RU's (Local Net) |
| 30 | 151.445 | 159.345 | San Bernardino RU (Local Net) |
| 31 | 151.445 | 159.390 | San Bernardino RU (Local Car-to-car) |
| 32 | 151.460 | 159.390 | Madera/Mariposa RU & Sonoma RU (Car-to-car) |
| 33 | 164.175 | 164.975 | USFS Kalamath NF |
| 34 | 168.125 | 168.725 | USFS Inyo NF & Six Rivers NF |
| 35 | 168.650 | 168.650 | USFS Region #5 |
| 36 | 168.675 | 170.575 | USFS Sequoia NF |
| 37 | 168.725 | 170.125 | USFS Six Rivers NF |
| 38 | 168.750 | 168.150 | USFS Stanislaus & Modoc NF's |
| 39 | 168.750 | 170.500 | USFS Stanislaus & Modoc NF's |
| 40 | 168.775 | 170.575 | USFS Sequoia & Tahoe NF's |
| 41 | 169.175 | 169.975 | USFS Mendocino NF |
| 42 | 170.000 | 170.000 | USFS Air-to-Ground |
| 43 | 170.550 | 169.900 | USFS Los Padres NF |
| 44 | 171.400 | 170.600 | USFS Sierra NF |
| 45 | 171.475 | 169.875 | USFS San Bernardino NF |
| 46 | 171.525 | 169.950 | USFS Eldorado NF |
| 47 | 171.575 | 169.100 | USFS Angeles NF (F-1) |
| 48 | 171.575 | 172.375 | USFS Angeles NF |
| 49 | 172.225 | 171.475 | USFS Lassen NF |
| 50 | 168.050 | 168.050 | USFS Ground TAC #1 (Crew Net) |
| 51 | 168.200 | 168.200 | USFS Ground TAC #2 (Crew Net) |
| 52 | 168.600 | 168.600 | USFS Ground TAC #3 (Crew Net) |
| 53 | 168.700 | 170.975 | USFS Fire Control #1 |
| 54 | 168.100 | 170.450 | USFS Fire Control #2 |
| 55 | 168.075 | 170.425 | USFS Fire Control #3 |
| 56 | 166.375 | 166.975 | BLM #1 (Bureau of Land Management) |
| 57 | 166.487 | 167.075 | BLM #2 (Bureau of Land Management) |
| 58 | 166.750 | 168.300 | ? |
| 59 | 154.160 | 154.160 | OES TAC #1 (Fireground) |
| 60 | 154.220 | 154.220 | OES TAC #2 (Fireground) |
| 61 | | | [OPEN FOR FUTURE USE] |

| | | | |
|---|---|---|---|
| 62 | 154.280 | 154.280 | OES White #1 (Statewide Mutual Aid) |
| 63 | 154.265 | 154.265 | OES White #2 |
| 64 | 154.295 | 154.295 | OES White #3 |
| 65 | 154.340 | 154.340 | LA County FD #2 (Valley Dispatch) |
| 66 | 154.400 | 154.400 | LA County FD #3 (Antelope Dispatch) |
| 67 | 154.430 | 154.430 | LA County FD #1 (LA Dispatch) |
| 68 | 154.010 | 154.010 | Ventura County FD TAC #1 |
| 69 | 154.325 | 154.325 | Ventura County FD TAC #2 |
| 70 | 153.770 | 154.250 | Santa Barbara County FD TAC #1 |
| 71 | 153.905 | 154.995 | Santa Barbara County FD TAC #2 |
| 72 | 153.980 | 153.980 | ? |
| 73 | | | [OPEN FOR FUTURE USE] |
| 74 | | | [OPEN FOR FUTURE USE] |
| 75 | | | [OPEN FOR FUTURE USE] |
| 76 | | | [OPEN FOR FUTURE USE] |
| 77 | | | [OPEN FOR FUTURE USE] |
| 78 | | | [OPEN FOR FUTURE USE] |
| 79 | 169.125 | 168.325 | USFS Southern California |

NOTES: SCAN MODE: Normal / CTCSS / Busy
USFS (US Forest Service) NF (National Forest)
OES (Office of Emergency Services) RU (Ranger Unit)

From Bob [PA-223]: An interesting list of Car Racing freqs, for those who following the Car Racing circuit:

| | | | |
|---|---|---|---|
| 151.625 | Jim Busby Racing | 151.745 | Raceway Promotions |
| | Vern Anderson Racing | 464.3125 | Score Racing |
| 154.600 | Delu Race Cars | 464.8125 | Score Racing |
| 151.625 | John Fizpatrick Racing | 151.775 | Jerry Sohl Racing |
| 155.220 | International Racing Crew | 461.5375 | Strandwold Racy |
| 464.500 | James Tool Racing | 151.625 | Gregg Symonds Racing |
| 464.875 | BCV Racing | 151.925 | Gregg Symonds Racing |

152.960 ESPN (microphone on driver's cars)
462.650 ESPN (also on 462.550, 462.575, 462.625, 464.500 Mhz)

From Skip [CASD-001]: He has submitted an extensive listing of the San Diego County area, including a map of SDPD (Station divisions with appropriate channels) that follows the end of the column.

SAN DIEGO SO

| | | | |
|---|---|---|---|
| 453.725 | (R) | F-1 | Car to car |
| 453.750 | (R) | F-2 | North Coastal |
| 453.925 | (R) | F-3 | North Inland |
| 453.500 | (R) | F-4 | Eastern |
| 453.950 | (R) | F-5 | Southern |
| 453.400 | (R) | F-6 | Administration |
| 453.575 | (R) | F-7 | Inquiry |
| 453.100 | (R) | F-8 | EMERGENCY |
| 453.425 | (R) | F-9 | North Tactical |
| 453.825 | (R) | F-10 | South Tactical |
| 453.425 | (S) | F-11 | North Tactical |
| 453.250 | | | Detectives |
| 453.975 | | | Detectives |

INTERSYSTEM CHANNELS

| | | |
|---|---|---|
| 154.920 | CLEMARS (PD) | (Base) |
| 154.935 | | (Mobile) |
| 154.905 | | (Portable) |
| 460.025 | | (UHF) |
| 153.995 | BLUE (County PD's) | |
| 453.675 | CLERS (State admin net) | |
| 155.475 | NALEMARS (National PD I/S | |
| 155.085 | RED (County Fire I/S) | |
| 154.280 | WHITE 1 (State Fire) | |
| 154.295 | WHITE 2 (State Fire) | |
| 154.265 | WHITE 3 (State Fire) | |
| 155.340 | HEAR (Hospital I/S) | |

NEWS MEDIA

| | | |
|---|---|---|
| 450.4375 | F1/2 | Channel 39 |
| 450.4625 | F3/4 | Channel 39 |
| 450.3375 | F1 | Channel 8 |
| 450.4125 | F2 | Channel 8 |
| 161.700 | F1 | Channel 10 |
| 450.2375 | F2 | Channel 10 |
| 455.925 | Monica Zeck Traffic | |
| 455.2375 | Steve Springer Traffic | |

CHP RADIO SYSTEM

| | | |
|---|---|---|
| 42.880 | (B) | ORANGE San Diego |
| 42.660 | (M) | ORANGE San Diego |
| 42.120 | (B) | GOLD Oceanside/El Cajon |
| 42.200 | (M) | GOLD Oceanside/El Cajon |
| 42.340 | (B) | BLUE Statewide |
| 42.180 | (M) | BLUE Statewide |
| 154.905 | (R) | Mobile Extender |
| 154.920 | (S) | Mobile Extender |

| COUNTY FIRE | (PRIMARY) | (TACTICAL) |
|---|---|---|
| East County | 154.205 | 154.250 |
| North County | 154.235 | 154.355 |
| North Coastal | 154.385 | 154.355 |
| South Bay | 154.415 | 153.890 |
| Volunteers | 154.175 | |

| PARAMEDIC/HOSPITAL NETS | | |
|---|---|---|
| Tri-City | 463.075 B | 468.075 M |
| Palomar | 463.175 B | 468.175 M |
| Scripps | 463.000 B | 468.000 M |
| Sharp | 463.125 B | 468.125 M |
| Mercy | 463.025 B | 468.025 M |
| Bay General | 463.150 B | 468.150 M |
| Paradise | 463.075 B | 468.075 M |
| Grossmont | 463.050 B | 468.050 M |
| Station X | 463.100 B | 468.100 M |
| Station X Disp | 462.950 | (MED 9) |
| Station X Disp | 462.975 | (MED 10) |
| Life Flight | 462.975 | (Dispatch) |

| CALIFORNIA DEPT OF FORESTRY | | |
|---|---|---|
| 151.190 | (R) | LOCAL Net |
| 151.265 | (R) | REGION Net |
| 151.355 | (R) | STATE Net |
| 151.295 | | AIRCRAFT Net |
| 151.220 | | FIRE SCENE Net (red) |
| 151.250 | | TAC 1 |
| 151.370 | | TAC 2 |

| STATE AGENCIES | | |
|---|---|---|
| 151.430 | (R) | Fish & Game |
| 44.680 | | State Parks (F-1) |
| 44.800 | | State Parks (F-2) |
| 154.680 | | Dept of Justice (F1/2) |
| 154.920 | | Dept of Justice (F-3) |
| 154.935 | | Dept of Justice (F-4) |
| 154.905 | | Dept of Justice (F-5) |
| 154.665 | | Dept of Justice (F-6) |
| 154.695 | | Dept of Justice (F-7) |
| 153.755 | | Dept of Justice (F-8) |
| 453.375 | (R) | State Police |
| 47.100 | | CALTRANS (Maintenance) |
| 47.080 | | CALTRANS (Construct) |
| 453.900 | | CALTRANS (Bridges) |
| 154.160 | | OES (F-1) |
| 154.220 | | OES (F-2) |
| 153.755 | | OES |
| 47.580 | | Civil Defense Net 1 |
| 47.620 | | Civil Defense Net 2 |

| UTILITIES | |
|---|---|
| 153.710 | SDG&E (Elect Trouble) |
| 153.500 | SDG&E (Distribution) |
| 153.575 | SDG&E (Gas Trouble) |
| | SAN ONOFRE POWER PLANT |
| 451.025 | Unit 1 Security |
| 451.250 | Unit 2/3 Security |
| 451.200 (R) | Construction/Admin |

| SAN DIEGO FIRE DEPARTMENT | | |
|---|---|---|
| 154.310 | F-1 | Dispatch |
| 154.415 | F-2 | Teletype/Tactical |
| 153.785 | F-3 | Medical Response |
| 154.430 | F-4 | Tactical |
| 154.280 | F-5 | White 1/Tactical |
| 155.085 | F-6 | Red/Tactical |
| 154.295 | F-7 | White 2/Tactical |
| 154.085 | F-8 | (R) Command |

[NOTE: Dispatch of "Channel 8, Tac 7" means command channel is 8, & fire scene is 7.]

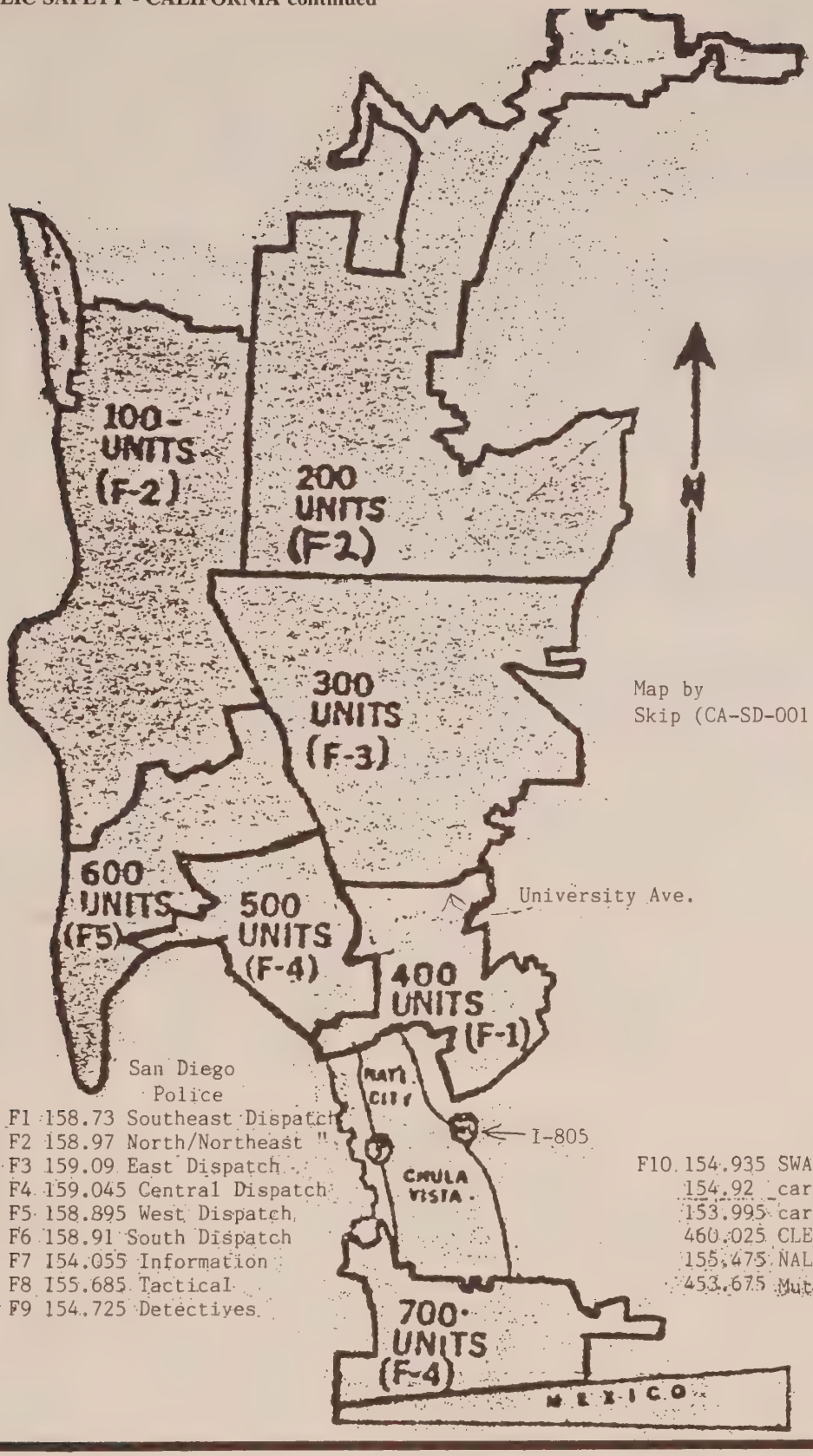
| COUNTY MEDICAL NET | | |
|---|---|---|
| 155.025 | F-1 | Trauma Net (Alerting) |
| 155.325 | F-2 | Trauma Net |
| 155.175 | F-3 | Hosp/Ambulance |
| 155.385 | F-4 | Hospital Admin Net |
| 155.160 | F-5 | Car-to-car |
| 155.340 | F-6 | Interhospital Net |

| US FOREST SERVICE (CLEVELAND NF) | | |
|---|---|---|
| 168.750 | (R) | FIRE Net |
| 415.450 | (R) | FIRE Net (Relay Link) |
| 168.150 | | ADMIN Net |
| 415.425 | (R) | ADMIN Net (Relay Link) |
| 166.675 | | AIRCRAFT Net |
| 168.200 | | FIRE SCENE Net |

| MISC. BUSINESSES | |
|---|---|
| 463.725 | IT Corp (Hazardous waste) |
| 463.450 | IT Corp (Hazardous waste) |
| 160.650 | SDA&E Railroad |
| 160.665 | SD Trolley (Operations) |
| 160.935 | SD Trolley (Security) |
| 452.775 | Armored Transport Inc. |
| 151.460 | San Diego Zoo (Maint) |
| 151.895 | San Diego Zoo (Security) |
| 453.200 | SD Wild Animal Park (Ops) |
| 453.800 | SD Wild Animal (Monorail) |
| 464.2125 | Sea World (Security) |
| 154.515 | Sea World (Security) |
| 462.0625 | Sea World (Operations) |
| 151.715 | Del Mar Racetrack (Ops) |
| 151.865 | Del Mar Racetrack (Ops) |
| 151.745 | Del Mar Racet (Turf Club) |
| 151.655 | San Diego Maritime Museum |
| 151.925 | SD Stadium (ushers) |
| 154.540 | SD Stadium (ushers) |
| 154.600 | SD Stadium (parking) |
| 154.570 | SD Stadium (medical) |
| 462.675 | REACT Teams |

| AMERICAN RED CROSS | |
|---|---|
| 47.420 | Emergency |
| 461.225 | Business Operations |
| 462.650 | Transportation |
| 44.600 | Dial-A-Ride Transport |

The frequency will be clear for routine traffic, after the SDPD map and channel assignments...




Map by
Skip (CA-SD-001)

San Diego
Police

F1 158.73 Southeast Dispatch
F2 158.97 North/Northeast "
F3 159.09 East Dispatch
F4 159.045 Central Dispatch
F5 158.895 West Dispatch
F6 158.91 South Dispatch
F7 154.055 Information
F8 155.685 Tactical
F9 154.725 Detectives

F10 154.935 SWAT
154.92 car to car
153.995 car to car
460.025 CLEMARS
155.475 NALEMARS
453.675 Mutual aid

# RAILROADS

**Gary L. Sturm and Bill Farmer, Editors**

**Send information about railroad frequencies and their uses, railroad system details, and related questions to:**

**Bill Farmer, P.O. Box 1838, Thousand Oaks, CA 91360**

We received a number of letters this month and want to share them all with you, so we'll get right down to business.

[From Vincent A. Purn (NJ-177)]: I noted a query in your April column from Carl Gerosa who wanted to know what "MO and NW" bases were on the Metro-North Commuter Railroad. Well, both "MO" and "NW" are interlocking towers. The first is located 5.4 miles north of Grand Central Terminal in New York City on the main line (Hudson Division) where the lines to Albany and Boston split. "NW" is located on the Harlem Division, 23.9 miles from Grand Central Terminal in North White Plains.

[From Warren M. Silverman (NY-214)]: I believe someone asked about the relationship Metro-North operates under [April column -ed.]. Metro-North operates the Harlem and Hudson lines under a contractual agreement with Metropolitan Transportation Authority (MTA); the New Haven line under contract with MTA and Connecticut Dept. of Transportation; and the Port Jervis and Passack Valley lines under contract with the New Jersey Dept. of Transportation (NJ Transit).

[From H. Irvin Smith (TX-022) replying to an inquiry by Michael McWilliams in our April column]: Train watchers in Texas should buy the excellent set of county maps available for $20 (postage included) from: Highway Dept., Attn D-10, Box 5051, Austin, TX 78763. Ask for the Bound Set of Quarter-Scale Maps. This book has about 800 pages of 11 x 14 maps showing railroads and much more. Many of the counties have supplemental maps giving more details and even showing passing sidings. Individual county maps are offered for 35 cents. Similar bargains are available in other states.

[From Larry Reed (CT-046)]: Recently I appealed to you for the frequencies which would be useful on our train trip from New York to Toronto. This letter is to thank you very much for your help. I used the HX-1500 and found all reception perfect. On the way back we were stopped for an hour and a quarter to get another engine because the Amtrak engine developed a crack in the air reservoir. Of course, I heard all the bad news at this stopping point near Amsterdam, NY. The frequencies which were most active were: 161.280 Amtrak, 160.410 Amtrak, 161.415 VIA, 161.205 VIA, 160.935 VIA.

Tom Heiderer (WI-006) sent two newspaper clippings from the Milwaukee Journal. The first says the new Wisconsin Central [see our April and July columns] expects to begin operation in August. The number of employees will be reduced from 950 to 750. The second article tells of an agreement to sell 320 miles of Chicago & North Western track in Wisconsin and Michigan to L.B. Foster Co. [see our April column]. The closing date of the sale was expected to be about June 30, and the new railroad is to be called Escanaba & Northern Railroad Corp. Please keep us informed of radio frequencies and usage on these new railroads.

[From RCMA Chicago Chapter newsletter written by moderator Ed Sirovy (IL-004)]: I have been observing the Railphone situation on the BN portion of Metra [see the February RR column -ed.]. Trains equipped with phones are identified with a "public phone on board" sign on the train sign at the departure gate. Cars with phones are identified by a "public phone on board" sign by the loading door. Only push-pull cab cars are equipped with phones. Within the cars, the phones are mounted in the aisle just inside the door from the center vestibule. There is no privacy and users cannot sit down. The phones are mounted quite low to accommodate wheelchair passengers.

[From George Wight (CA-TO-001)]: Here are some frequencies for the RCMA Newsletter under railroad. I can not receive this from my home but RCMA members may want to tune in. This is in the State of Nevada: Southern Pacific Train - 160.380 and 160.770. [Our records show these frequencies assigned to Union Pacific Railroad (ex-Western Pacific road and yard). Can anyone confirm their use by Southern Pacific? -ed.]

From an anonymous contributor, we received an announcement of a railroadiana and model train show and sale on May 17 in Jersey City, NJ, and a tour of Amtrak's Sunnyside Yard in New York on June 20. Both were received too late to be published in time.

From California we received a list of frequencies for Stockton, CA copied from Police Call Volume 9. Unfortunately we do not have the space to reproduce listings from Police Call, and even if we did, to do so would violate copyright laws. Thanks for taking the trouble to

write, and we hope you'll do so again, sending us the frequencies you actually monitor on your scanner and what they are being used for.

[From David Donald, G.P.O. Box 1707, Sydney, NSW 2001, Australia; forwarded to us by General Editor Bill Mauldin]: I am a rail enthusiast and, apart from a general interest in most things of a train/rail nature, I have a special interest in the different methods of signalling and safeworking used by the various railway operators, plus the use being made of radio communications for all aspects of railway operations. As a result, I am a fairly avid scanner operator. Accordingly, I am trying to get in contact with others who have similar interests, and who would be prepared to communicate with me on a regular basis. Apart from railway frequencies, I tend to listen quite periodically to police and associated organizations. Thus, I would be most grateful if you could publicize my interest and my desire to contact those similarly interested. All letters would be most welcome. [We will send David copies of our past columns on Australian Railways and hope he will send us some frequency information on New South Wales, one major area of Australia where we are lacking data. -Bill]

## CHICAGO & NORTH WESTERN—EASTERN DIVISION

Effective at 8:01 a.m., March 9, 1987 all trains entering Proviso [yard at Chicago -ed.] at Grand Avenue or HM enroute to Yard 9 must remain on Channel 3. All trains operating on the Main track east of HM must use Channel 1.

The proper channel for each Subdivision is as follows: Belvidere, Geneva (east of HM), Harvard, Madison, Rockwell, St. Louis, and Troy Grove subdivisions use channel 1. Geneva (HM to Clinton), Kenosha, New Line, and Skokie subdivisions use channel 3.

## MINNESOTA

by DANIEL McNULTY

[In our June column we published a list of Minnesota frequencies sent in by Daniel. While that column was at the printer, we received an updated list from Daniel dated 5/14/87. Following are the additions and changes reflected on the new list: -ed.]

| | |
|---|---|
| 161.160 | Ch 2 Burlington Northern Yards |
| 161.040 | Ch 3 Chicago & North Western Dispatcher/Train |
| 160.485 | Chicago & North Western Police |
| 160.725 | Ch 6 Soo Line Shoreham Yard |
| 160.275 | Dakota Rail Inc. (Spring Park) |
| 161.055 | Dakota Rail Inc. (Spring Park) Road |

## MINNESOTA

by ROGER W. WEST (MN-052)

I listen to the railroads in the Wyoming, MInnesota area on the following frequencies. Wyoming is approximately 40 miles northeast of the Twin Cities, in Chicago County. I feel you are doing a fine job on the column and I enjoy it very much.

Burlington Northern:

| | |
|---|---|
| 161.100 | Ch 1 Road - Wyoming, MN |
| 161.160 | Ch 2 Road - St. Paul |
| 160.365 | Hump - St. Paul |
| 160.410 | 35th St. Tower - Fridley |
| 160.665/161.505 | PBX - St. Paul |

Chicago & North Western:

| | |
|---|---|
| 160.890 | Ch 1 Road - St. Paul |
| 160.455 | Ch 2 Yard - St. Paul |

Soo Line:

| | |
|---|---|
| 161.370 | Ch 1 Road - St. Paul |
| 161.520 | Ch 2 Road - St. Paul |
| 160.725 | Ch 4 Yard - St. Paul |

Milwaukee Road: [now part of Soo Line -ed.]

| | |
|---|---|
| 160.770 | Road - St. Paul |
| 160.920 | Yard - St. Paul |
| 161.205 | Police - St. Paul |

Minnesota Transfer:

| | |
|---|---|
| 160.560 | Road - St. Paul |
| 160.740 | Yard - St. Paul |

## JEFFERSON AND TUSCALOOSA COUNTIES, ALABAMA

by WAYNE PULLEN (AL-028)

[Wayne's contribution was scheduled for publication in the June Newsletter but was edited out due to insufficient space. We have condensed it in order to fit it in this month. -ed.]

Alabama Great Southern Railroad [part of Southern Railway -ed.]:

| | |
|---|---|
| Bessemer: | 160.245, 160.950 |
| Tuscaloosa: | 160.950 |

Birmingham Southern Railroad:

| | |
|---|---|
| Birmingham & Fairfield: | 160.275, 160.290, 160.335, 160.425, 160.515, 160.575, 160.605, 160.755, 160.815, 161.025, 161.265, 161.325 |
| Birmingham: | 161.445 |
| Fairfield: | 160.890 |

Burlington Northern Railroad:

| | |
|---|---|
| Bessemer: | 160.215 |
| Birmingham: | 160.485, 160.530, 160.710, 160.725, 160.875, 160.965, 160.995, 161.115, 161.160, 161.190, 161.235. 161.415, 161.520, 460.675 |
| Adamsville: | 161.160 |

Seaboard System Railroad:

| | |
|---|---|
| Birmingham: | 160.380, 160.440, 160.590, 160.620, 160.860, 160.980, 161.010, 161.055, 161.265, 161.310, 161.370, 452.425, 452.950 |
| Bessemer: | 161.370 |
| Brookwood: | 161.370 |
| Tuscaloosa: | 161.370, 161.520 |

Southern Railway:

| | |
|---|---|
| Birmingham: | 160.320, 160.365, 160.665, 160.950, 161.115, 161.145, 161.205, 161.250, 161.490 |
| Oak Grove: | 160.245, 160.950 |
| Bessemer: | 160.650, 160.950, |
| Brookside: | 160.950 |
| Leeds: | 160.950 |
| North B'ham: | 160.950 |
| Tuscaloosa: | 160.950 |
| Irondale: | 161.535 |
| Norris Yards: | 161.535 |

So long until we meet again next month... —Gary & Bill

# VHF MARINE

**Send information, articles, frequencies and their use, and questions that relate to private, commerical, and Coast Guard VHF maritime and inland waterways radio communications to:**

**Emmett L. Baxter, Jr., 4122 Granby St., Norfolk, VA 23504**

Hello and welcome to your August 1987 VHF Marine Column.

Our first report comes to us from LaVerne (CA-ST-???). Laverne sends in his listening list for the Stockton,California area.

MARINE TELEPHONE:

157.200 , 157.225 , 157.250 , 157.275 , 157.300 , 157.325 , 157.350 , 157.375 , 157.400 , 161.800 , 161.825 , 161.850 , 161.875 , 161.900 , 161.925 , 161.950 , 161.975 , 162.000.

STOCKTON MARINE PHONE: 162.000

MARINE - EMERGENCY: Channel 16 (156.800)

MARINE - STATE: Channel 17 (156.850)

MARINE - COMMERCIAL: Channel 18 (156.900)

PORT OF STOCKTON - Police Department: 154.830
- Operations: 158.745
- Warehousing: 155.865

Thanks to LaVerne for his first list - I will be looking for more information as he finds it.

Our next report comes from Roger (MN-052). His report covers the Wyoming,Minnesota area.

Wyoming,Minnesota is located approximately 40 miles northeast of the Twin Cities is Chsago County and near four major rivers. The Mississippi River and the Minnesota River on the West and South, The St. Croix River and the Apple on the East and North. Rogers list follows:

164.7500 - St. Croix National Scenic Riverway
156.3000 - Safety Communications
156.5000 - Tow Boats
156.7000 - Locks and Bridges
156.8000 - Calling and Distress
161.9000 - Telephone - Marine Operator
162.0000 - Telephone - Marine Operator
156.4250 - Boat to Boat
156.5250 - Boat to Boat
156.6250 - Boat to Boat
156.6500 - Army Corps of Engineers
156.7000 - Army Corps of Engineers
163.4125 - Army Corps of Engineers
156.6000 - Army Corps of Engineers
156.5000 - Army Corps of Engineers
156.4500 - Army Corps of Engineers
157.1250 - Army Corps of Engineers
165.2375 - United States Customs
156.3000 - United States Coast Guard
156.6000 - United States Coast Guard
156.7000 - United States Coast Guard
157.0500 - United States Coast Guard
157.0750 - United States Coast Guard
157.1000 - United States Coast Guard
161.9000 - Marine Radio,Inc.

Thanks to Roger for his report and I hope to see many more when he has information.

Our next report comes from David (CA-SF-025). David is one of our San Francisco reporters and send in material quite often. Today David went on a weekend walk and came up with this.

BLUE AND GOLD FLEET: (Pier 39)
OSKI , OLD BLUE , GOLDEN BEAR , GOLD RUSH (Catamaran)
Uses: Bay Cruises and Whale Watching

RED AND WHITE FLEET:
DOLPHIN (Catamaran)
Red and White Fleet is owned by Crowley Maritime Corp.. The fleet consists of numerous boats used for bay cruises, Alcatraz and Angel Islad Trips, Marin Commuter Trips, and runs thru the Bay to Marine World in Vallejo. Crowley Maritime also operates pilot and tug boats.

PIER 7:(PILOT BOATS)
DRAKE, CALIFORNIA

PIER 9 EAST:(HARBOR TUGS)
MARS , SEA SCOUT , SEA DUKE , SAN JOAQUIN RIVER

PIER 9 WEST:(HARBOR TRUGS)
DOMAR COMMANDER , (Two unidentified Tugs)
PIER 33:(HORNBLOWER YACHTS)
Operates the San Francisco a floating restaurant that cruises around the bay - only in San Francisco

Note that these vessels all check in on ı56.650 for Bay Trips.

Thanks David and hope to hear from you soon.

Well thats it for this month. Next month a report from the Chicago Area.

# RCMA NEW MEMBERS LIST

AR 021 - RENEE POWELL;BOX 17;GRANNIS;AR;71944;
CALA700 - BOB JORGENSEN;105 W PAYSON;GLENDORA;CA;91740;
CAOR329 - DON BEDE;1920 W HALL;SANTA ANA;CA;92704;
CAPL001 - ROBERT KJOLSETH;3945 GRASS VALLEY HWY SP 10;AUBURN;CA;95063;
CASD083 - STEVE COVAULT;5011 LOTUS ST #1;SAN DIEGO;CA;92107;
FL 238 - STANLEY A SHADLER;RT 2 BOX 3735;PALATKA;FL;32077;
FL 239 - GILMAN --LAST NAME AND ADDRESS WITHELD BY REQUEST
IL 353 - MIKE MAZURCK;928 VALLEY STREAM;WHEELING;IL;60090;
IL 354 - DAVID H HUDIK;138 INDIAN LANE;LAKE MARION;IL;60110;
IL 355 - ROBERT --LAST NAME AND ADDRESS WITHELD BY REQUEST
KS 043 - CHARLES KNOWLES;6136 WESTGATE;SHAWNEE;KS;66216;
MA 176 - ROBERT J RONGONE;53 WOODBINE ST;QUINCY;MA;02170;
MO 110 - DANIEL J PURCIARELE;401 COLONIAL COURT;LEES SUMMIT;MO;64063;
MO 111 - JULIE GEORGE;4104 WHEELING;KANSAS CITY;MO;64117;
NC 080 - JEFFREY KLOPPER;1509 SHARON DR;WAXHAW;NC;28173;
NV 019 - DAVID C LAW;P O BOX 6346;RENO;NV;89513;
NY 387 - NED E --LAST NAME AND ADDRESS WITHELD BY REQUEST
NY 388 - RICHARD LEWANDOWSKI;52 CANADAWAY ST 2ND;FREDONIA;NY;14063;
NY 389 - DAVID ALAN STRONG;1323 MIDDLE ROAD;RUSH;NY;14543;
NY 390 - HENRY V ORLANDO;4 OLD OAK LANE;LEVITTOWN;NY;11756;
NY 391 - GEORGE HEARD;17 THORNE AVE;HEMPSTEAD;NY;11550;
OR 075 - CONNIE --LAST NAME AND ADDRESS WITHELD BY REQUEST
PA 245 - RICHARD J AVERDANO;BOX 132;HATBORO;PA;19040;
TX 199 - JOHN B WILSON;P O BOX 51294;FORT WORTH;TX;76105;
TX 200 - DAVID L BREWER;506 E CREATH;SAN ANTONIO;TX;78221;
UT 022 - GARY I LAMBERT;7467 ANTONIO DR;MAGNA;UT;84044;
VA 129 - ALLAN D MORRIS;308 PEARL AVE;BIG STONE GAP;VA;24219;
VA 130 - DONALD A OLSON;201 LONGWOOD DRIVE;NEWPORT NEWS;VA;23606;

# *MEMBERSHIP CARDS AND BADGES*

RCMA has no badges, decals, or membership cards for sale or distribution. The label on your newsletter is your membership card. While other clubs may have gimmicks or commercial good deals, our good deal is your newsletter. You determine its content because you write it.

# *MAILING PROCEDURES*

The newsletter mailed each month has a cover date for the following month. This practice is followed so that the US Post Office can deliver your issue no later than the first of the month designated on the cover.

New members whose applications are received before the end of the month will begin receiving the newsletter the following month. The first issue will be dated the month after that — as described above.

# *RENEWAL PROCEDURES*

During the month your membership — and therefore your newsletter delivery — is due to expire, you will receive a renewal notice in the form of a postcard. It contains all the information you need to continue receiving the newsletter.

Renewal checks and new membership applications received by RCMA's General Manager, P.O. Box 542, Silverado, CA 92676, are processed for deposit on a weekly basis. Actual computer updating is done at the end of each month. If your check/MO is received after this cut-off date, you will miss the next issue of the newsletter and your new renewal date will be moved back accordingly.

# *PRORATED MEMBERSHIPS*

Due to postage costs and other considerations, membership applications or renewals for any sum less than the current rate are prorated accordingly. This means that the renewal date will be due in less than a year. Please do not send more money to finish the year; just renew when your prorated date comes up.

Also because of postage costs, RCMA cannot comply with member requests to supply back issues free of additional charge (see the monthly Calendar section regarding ordering of back issues). If a late renewal results in a missed issue, the newsletter can be ordered from RCMA's secretary.

# *ADDRESS CHANGES*

MEMBER notifications of address changes are also updated at the end of each month. If this type of address change notice arrives after the cut-off date, the mailing label will not reflect the new address until the following month.

The newsletter is mailed 3rd class under a bulk mail permit. When a member's address change is supplied by the POST OFFICE (instead of by the member), the charge to the club is 30¢.

# *SPECIAL FREQUENCY REQUESTS*

Get in touch with your local RCMA group (see monthly Calendar section for chapter listings) or use the Contact/Information Wanted column for frequencies in your area. RCMA is not yet set up for national distribution of frequencies, although ultimately, the 'big picture' could include copies of the FCC and IRAC data bases, a fast computer, and software to select and sort in any order.

Contributions of frequencies and other material must be sent to the appropriate newsletter editor. (Editors use their own discretion in printing material sent them by non-members.) Data sent to P.O. Box 4563 is always subject to delay and sometimes cannot be forwarded because of postage costs.

# *DISCLAIMER*

RCMA is a non-profit club for scanner enthusiasts. Neither RCMA or its newsletter are affiliated with, participate in the management of, or are responsible for, any other organization or publication. This disclaimer includes application to POLICE CALL, an annual publication put out by RCMA's good friend Gene Hughes. Queries about this publication cannot be answered by RCMA.

PLEASE REMEMBER — When writing to RCMA for any reason, include your membership number. Use it on your correspondence, checks, or money orders. RCMA tries hard to be responsive to your questions/problems. Using your membership number when you write helps us be of help to you.

The Radio Communications Monitoring Association is a radio club for persons interested in listening to two-way communications. RCMA was founded in May 1975 and is a Full Member of the Association of North American Radio Clubs (ANARC).

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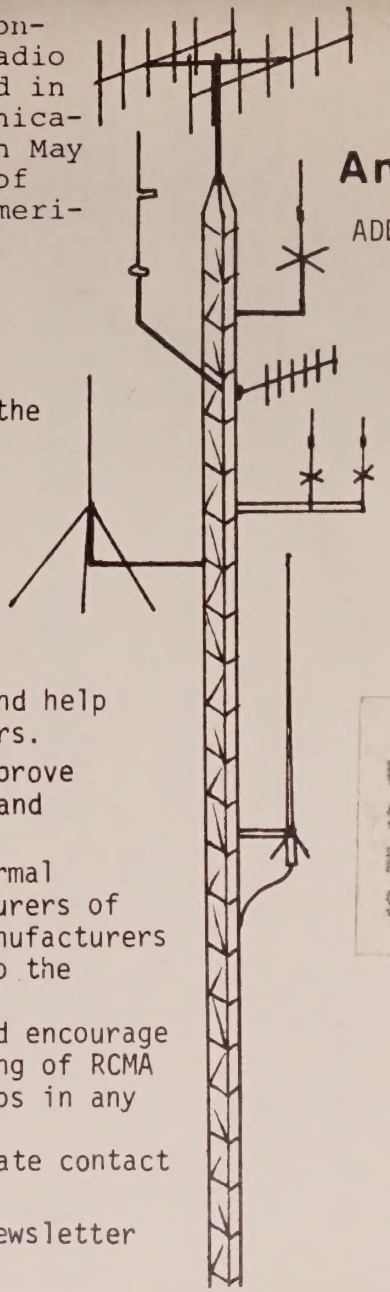
The goals of RCMA are:

1) To provide a fraternity for those who seriously pursue the hobby of monitor radio listening.
2) To try to be knowledgeable about two-way radio systems and operations.
3) To promote an understanding of the legal and ethical uses of monitor receivers.
4) To share information with and help other monitor radio listeners.
5) To try to understand and improve receivers, antenna systems and related equipment.
6) To offer suggestions and formal recommendations to manufacturers of monitor receivers and to manufacturers of other products related to the hobby.
7) To offer suggestions for and encourage the organizing and conducting of RCMA meetings and tours for groups in any geographic area.
8) To encourage and to facilitate contact between members.
9) To publish a regular club newsletter devoted to the hobby.

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**P.O. Box 4563**
**Anaheim, CA 92803**


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